



## CENTRE OF ADVANCED FACULTY TRAINING VETERINARY PARASITOLOGY

### Karnataka Veterinary Animal & Fisheries Science University, P.B. No. 6, Nandinagar, Bidar-585401

#### **Introduction**

The Department of Veterinary Parasitology became functional from the year 1960 in the Veterinary College at Hebbal in Bangalore affiliated to the University of Agricultural Sciences established in 1958. It then became a constituent of the Karnataka Veterinary , Animal and Fisheries Sciences University, Bidar from 2005. It offers courses for undergraduate students of Veterinary Science, MVSc. and Ph.D programmes in Veterinary Parasitology .

The main activities of the department are teaching, research, training, diagnostic services and consultancy on parasitic diseases.

- The department offers courses for BVSc & AH students from the II year to V year and courses for MVSc and Ph.D students in this field of specialisation and also to students of other departments.
- Forty two students have completed Masters degree programme and seven students PhD. degree program.
- More than 400 research papers have been published by staff of the department.
- The department has organised many national and international conferences.

The department was given the status of **Centre of Advanced Studies (CAS) in Veterinary Parasitology in 1995** by Indian Council of Agricultural Research (ICAR) during the VIII plan. It has functioned during the eighth, ninth, tenth and eleventh plan periods and is now known as the **Centre of Advanced Faculty Training (CAFT)**. The Centre has conducted 27 training programmes for scientists and faculty members all over the country. The CAFT also conducts and participates in Training for Veterinary Officers funded by the ASCAD, State government, KVC and other agencies. The CAFT has conducted research on various aspects and developed instructional material.

The department has completed more than fifty research projects on parasitic disease problems funded by the ICAR, World bank and other private agencies with significant findings regarding etiology, biology, epidemiology, immunology, treatment and control and molecular biology of many helminth, protozoan and arthropod parasites.

Consultancy services on parasitic diseases problems are provided for field veterinarians and also farmers, pet owners and others. Expertise is available on specific identification of parasites of animals and humans which is utilized by both state farms, hospitals, other institutions and also from different Universities in India. Diagnostic services are provided on parasitic diseases on a regular basis to Veterinary Officers of the Department of AH & VS, Government of Karnataka.

### Objective of CAFT

The primary aim of this Centre is human resource development by way of conducting training programmes for scientists and faculty members to update their knowledge in this discipline and acquire newer technologies. The other objectives of the CAFT is to develop instructional material, promote research work on emerging problems and introduce new techniques for adoption in diagnosis and control of parasitic diseases.

### Faculty: Name & Designation (as on 30.09.2011):

<b>Dr. Placid E. D'Souza</b>	Professor and Head cum Director, CAFT
<b>Dr. Nithin Prabhu</b>	Assistant Professor
<b>Dr. Sadhwi Sharma</b>	Assistant Professor
<b>Dr. C. Renukaprasad</b>	Director , IAH & VB
<b>Dr. Sudharani</b>	Scientist, IAH&VB
<b>Dr. G.S. Mamatha</b>	Asst. Director
<b>Dr. Jaya N. Lakkundi</b>	Project Assistant

Animal Disease Monitoring and Surveillance

### Human Resource Development

Particulars of Short Courses / Training program for HRD conducted during XI plan period

	<i>Name of the Program</i>	<i>Period</i>	<i>No. of Participants</i>		
			<i>Internal</i>	<i>External</i>	<i>Total</i>
	Trends and Perspectives in the Detection, Identification and Control of Parasitic Diseases	10.11.2008 to 30.11.2008	2	16	18
	Emerging and re-emerging parasitic diseases of Veterinary and Public Health importance	2.3.2009 to 21.3.2009	3	11	14
	Trends and Perspectives in the Biology, Ecology and Control of Parasitic diseases	11.3.2010 to 31.3.2010	4	10	14
	An update on conventional and new methods for identification, diagnosis and Control of Parasitic diseases	28.02.2011 to 20.03.2011	1	13	14
	Advances in Veterinary Entomology and Acarology"	21.11.2011 to 11.12.2011			15

## **Infrastructure development (equipments etc.)**

### **Infrastructure facilities created**

Air conditioned Seminar hall with LCD projector, Interactive board, slide projector, overhead projector, TV & VCR, Teaching and training Laboratory, Immunology and Molecular research laboratory, Computer room and Museum.

### **Equipment**

Laminar flow, Refrigerator BPL, Nikon F-001 camera, Plate wash (ELISA), Air conditioner, Sartorius electronic balance, Public address system, Centrifuge (superspin - R), Monocular laboratory microscope, Rota centrifuge, Trolleys, White board with easel stand, Television, VCR, Crompton pedestal fan, PCR Thermal cyclers, Projection screen, Leica Binocular research microscope, QBC V. Vety. Haematology system with QBC paralens, Kenstar water purifier, Immunoelectrophoresis equipment, Pest smasher, V-16 vertical gel electrophoresis apparatus, Dissection microscopes, Video camera, Regulator with cylinders, CO<sub>2</sub> incubator, Computer hardware with accessories, Insect cabinet, Multimedia unit computer, Over head projector, Slide magazine, Stereoscopic binocular microscope, Monocular microscope LM-52, Power pack ps-100 voltage digital, LCD multimedia projector, UV transilluminator, Serological water bath, Vortex mixer, Insect cabinet, Sony digital camera, Xerox machine. All the glassware, plastiware and equipment required for research and training purposes.

### **Renovation of Lecture Room/Laboratories**

Renovation of the seminar hall, laboratories, museum, computer room, immunology and molecular research laboratory, staff rooms and tick proof shed.

### **Library upgraded**

One hundred and eighty three books including text books, reference manuals, encyclopedias, colour atlases and video cassettes / CDs have been procured with CAFT grants

### **Awards/Recognitions:**

The following awards were received by Dr. Placid E. D'Souza the Professor cum Director CAFT

Best research article award in the Journal of Veterinary Parasitology during 2007

Best Veterinarian Award by Karnataka Veterinary Association during 2008  
Fellowship of the National Academy of Veterinary Science (India) during 2008

VS Alwar Memorial Award for best research article in Journal of Veterinary Parasitology 2008

Sri SM Ismail Oration award for excellence in research on helminth parasitic diseases by the Indian Association for the Advancement of Veterinary Parasitology during 2009

Dr. B.S. Pradeep, M.V.Sc. Scholar was awarded the Certificate of merit for Best Oral Presentation in Session IV , Chemotherapy & control in the XX National Congress of Veterinary Parasitology at Hisar by the Indian Association for the Advancement of Veterinary Parasitology

Dr.B.P.Pandey memorial oration award for best teacher in Parasitology during 2010 by the Indian Society for Parasitology

Four M.V.Sc students and one PhD. Student received the University Gold Medal of the KVAFSU for highest overall OGPA.

### **Publication**

- **International Journal - Two**

1. Prathapan Rema Prathiush, Placid Eugene D'Souza and Ananda K. Javare Gowda, 2008. Diagnosis of *Echinococcus granulosus* infection in dogs by a coproantigen sandwich ELISA. *Veterinarski Arhiv* 78,4: 297-305.

2. Rekha Hoskere K.Mallimath, Puttalakshamma G. Chikkachowdappa, Ananda K.Javare Gowda and Placid E.D'Souza , 2009. Studies on the prevalence of cryptosporidiosis in bovines in organized dairy farms in and around Bangalore, South India. *Veterinarski Arhiv* 79,5:461-470.

- **Indian Journals – Twenty Two**

1. Mamatha G.S. and Placid E.D'Souza, 2007. Gastrointestinal Parasitism in sheep and goats from different districts of Karnataka . *Intas Polivet* 8, 1 : 112-114.

2. Ananda.K.J. and Placid E.D'Souza. 2007. Prevalence of microfilariosis in dogs. *Indian Veterinary Journal* 84: 1204-1205.

3. Mamatha, G.S., Placid E.D'Souza and V.V.S. Suryanarayana, 2008. Serodiagnosis of bovine sarcocystosis by enzyme immuno transfer blot (EITB) in naturally infected cattle. *Journal of Veterinary Parasitology* 22, 2: 69-72.

4. Prathiush P. R., Placid E. D'Souza and Ananda K.J., 2008. Coproantigen detection of *Echinococcus granulosus* infection in dogs by counter immuno electrophoresis. *Journal of Veterinary Parasitology* 22, 2: 77-79.
5. Mamatha, G.S. and Placid E. D'Souza, 2008. Detection of sarcocystosis in cattle by enzyme linked immunosorbent assay. *Indian Journal of Veterinary Medicine* 28, 1: 54 – 56.
6. Ananda, K.J., Placid E. D'Souza and Prathiush, P. R. 2008. Diagnosis of *Echinococcus granulosus* infection in dogs by latex agglutination test. *Journal of Veterinary Parasitology* 22,2: 57-58.
7. Puttalakshamma, G.C., Mamatha G.S., Ananda, K.J. Prathiush P.R., Placid E. D'Souza and Suguna Rao, 2008. Prevalence of gastrointestinal parasites of poultry in and around Bangalore. *Veterinary World* 1,7:201-202.
8. K.J.Ananda, Ansar Kamran, C, Placid E. D'Souza, Yathiraj, S. and Prathiush, P. R. 2008. Parthenium hysterophorus toxicity in dogs. *Indian Veterinary Journal* 85:1337.
9. Arun M.Dafedar, Placid E. D'Souza, Ananda, K.J. and Puttalakshamma, G.C. 2008. Prevalence of Sarcocystosis in goats slaughtered at an abattoir in Bangalore, Karnataka state. *Veterinary World* 1,11:335-337.
10. Mohan K., Ananda K. J., Shridhar N.B., Puttalakshamma G. C. and Placid E. D'Souza 2009. Corneal opacity due to *Setaria digitata* in a Jersey cross-bred cow and its surgical management. *Veterinary World* 2,2:69-70.
11. Ananda K. J., Placid E. D'Souza and G. C. Puttalakshamma, 2009. Prevalence of Haemoprotozoan diseases in crossbred cattle in Bangalore north. *Veterinary World* 2,1:15-16.
12. Sumi Cherian and Placid E. D'Souza 2009. Coprological Diagnosis of Ovine Schistosomosis by different laboratory techniques. *Veterinary World* 2,7:271-273.
13. Prathiush P. R., Ananda K.J., and Placid E. D'Souza 2009. Comparison of excretory-secretory antigen and positive faecal supernatant antigen in the detection of *Echinococcus granulosus* infection in dogs by CIEP. *Veterinary World* 2,11: 421-422.
14. Sumi Cherian and Placid E. D'Souza 2009. Prevalence of Schistosomosis in sheep in Karnataka. *Journal of Veterinary Parasitology*. 23,1:93-94.
15. Mamatha, G.S., Placid E. D'Souza , and VVS Suryanarayana 2009. RAPD-PCR assay for differentiation of *Sarcocystis bovicanis* and *Sarcocystis bovifelis* in cattle. *Current trends in Parasitology pp101-107 eds.Veena Tandon, Arun K.Yadav and Bishnupada Roy. Panima Publ.Corp. New Delhi.*

16. Vasudha Kemmanu, Padmalini Mahendradas, Placid E. D'Souza, Naresh Kumar Yadav and Bhujanga Shetty K. , 2009. Unilateral acute conjunctivitis due to Ophthalmomyiasis externa caused by larva of *Oestrus ovis*. *Journal of Paediatric Ophthalmology and Strabismus* 46, 6:380-381.
17. Ramakrishna V., Prasad R.V., Jamuna K.V., Placid E. D'Souza, and Sivakumar S.A. 2010. Conventional approaches in preservation of tissues and specimens. *Insect Environment* 15 ,4:181-184 (Jan-March).
18. Raju Metri, Placid E. D'Souza, Narasimhamurthy H.N. and Umakanta, B. 2010. Evaluation of the efficacy of coccidiostats in *E. maxima* coccidiosis in broiler chickens. *Indian Journal of Poultry Science* 45, 1:77-80.
19. Ramakrishna V., Prasad R.V., Jamuna K.V. Placid E. D'Souza, and S.A. Sivakumar. 2010. Plastination and preservation of ecto and endoparasites by recycling environmental pollutants. *Insect Environment* 16, 3:122-124.
20. Sumi Cherian, Placid E. D'Souza, Renukaprasad C. and Suguna Rao 2010. Histopathological observations in ovine Schistosomosis. *Journal of Veterinary Parasitology*. 24,2:129-131
21. Pradeep B.S., Renukaprasad C. and Placid E. D'Souza 2010. Evaluation of the commonly used acaricides against different stages of *Rhipicephalus sanguineus* by in vitro tests. *J. Vet. Para* 24,2:185-188
22. Veena M., Placid E.D'Souza and Rathnamma D. 2011. Diagnosis of Cryptosporidiosis in cattle. *Indian Veterinary Journal*. 88, 9:68-70

- **Books:** nil

- **Manuals**

- 1) Placid E. D'Souza and G.C.Puttalakshamma 2008. Veterinary Clinical Parasitology- practical manual for post graduate students
- 2) Placid E. D'Souza, 2008. Trends and Perspectives in the detection, Identification and Control of Parasitic diseases. Compendium of the 11<sup>th</sup> National Training Programme of the CAFT
- 3) Placid E. D'Souza, 2008 New Techniques in the detection, Identification and Control of Parasitic diseases. Practical manual of the 11<sup>th</sup> National Training Programme of the CAFT
- 4) Placid E. D'Souza, 2008. Emerging and re-emerging parasitic diseases of Veterinary and Public Health importance. Compendium of the 12<sup>th</sup> National Training Programme of the CAFT

- 5) Placid E. D'Souza, 2008. New Techniques for diagnosis of Emerging and re-emerging parasitic diseases. Practical manual of the 12<sup>th</sup> National Training Programme of the CAFT
- 6) Placid E. D'Souza, 2009. Trends and Perspectives in the Biology, Ecology and Control of Parasitic diseases. Compendium of the 13<sup>th</sup> National Training Programme of the CAFT
- 7) Placid E. D'Souza, 2009. Diagnostic and preservation techniques in Parasitology. Practical manual of the 13<sup>th</sup> National Training Programme of the CAFT
- 8) Placid E. D'Souza, 2010. An update on conventional and new methods for identification, diagnosis and control of parasitic diseases. Compendium of the 14<sup>th</sup> National Training Programme of the CAFT
- 9) Placid E. D'Souza, 2010. Conventional and new techniques in Veterinary Parasitology. Practical manual of the 14<sup>th</sup> National Training Programme of the CAFT

- **Any other**

**Review articles - Two**

- 1) Placid E. D'Souza , (2008) Common zoonotic parasitic infections and their control. KVA Technical Symposium 2008, Souvenir 15-19
- 2) Mamatha G.S. and Placid E. D'Souza, (2008) Economic impact of Helminthosis in Livestock production. KVA Technical Symposium 2008, Souvenir 33-34

**Papers presented in Symposia/ Congress/Conference –Thirty four**

- 1) Placid E.D'Souza, (2007). Immunodiagnosis of Animal Parasitic Diseases - An Appraisal \*National Conference on Parasitic Diseases-Emerging Parasitic Diseases and their control in the New Millennium on April 13-15 2007. Rajiv Gandhi University of Health Sciences, Bangalore. p 5-6
- 2) G.S Mamatha and Placid E.D'Souza, (2007) Identification of Immunoreactive Peptides om Sarcocystic Species of Cattle By Enzyme Immunotransfer Blot (EITB) \*National Conference on Parasitic Diseases-Emerging Parasitic Diseases and their control in the New Millennium on April 13-15 2007. Rajiv Gandhi University of Health Sciences, Bangalore. p 53
- 3) Prathiush, P.R., Placid E.D'Souza and Ananda K. J, (2007) CIEP as a diagnostic tool for coproantigen detection of Echinococcus granulosus infection in dogs. \*National Conference on Parasitic Diseases-Emerging Parasitic

Diseases and their control in the New Millennium on April 13-15 2007. Rajiv Gandhi University of Health Sciences, Bangalore. p 53

- 4) Placid E. D'Souza (2007). Cysticercosis an old but persistent helminthosis in animals and man. Tropacon CME programme, Madras Medical College. October 5.
- 5) Rekha H.K.M., Puttalakshamma G.C., Placid E. D'Souza and Ananda K.J. (2007). The prevalence studies on Cryptosporidiosis in bovines. 6<sup>th</sup> Annual Conference of IAVPHS & National Symposium on "Horizons of Veterinary Public Health in Augmenting Veterinary, Medical and Environmental health" at Anand Agricultural University, Anand, Nov 29<sup>th</sup> & 30<sup>th</sup> A 7.4, p 290 - 291
- 6) Placid E. D'Souza (2007). Immunodiagnostic tests in parasitology with special reference to Cysticercosis. Guest lecture at the VI National Workshop on "Simple diagnostic methods in Clinical Microbiology" at the Dept. of Microbiology, JIPMER, Pondicherry on December 1.
- 7) A. Sha. Arun, P.R. Prathiush, B.R Harish, Swathi Bamne, Rishi Kesavan, Placid E. D'Souza and C. Renuka Prasad (2008). Taeniid Infestation in rescued Sloth Bears (*Melursus ursinus*) 20<sup>th</sup> & 21<sup>st</sup> June. Advances in management and diseases of wild animals. Veterinary College, KVAFSU, Hebbal, Bangalore-24. PP:14
- 8) Dhanalakshmi, H, Placid E. D'Souza, Jaganath M.S and Bhattacharya D. (2008). Porcine Cysticercosis in Karnataka- An Abattoir Study. 3<sup>rd</sup> Convention of Indian Meat Science Association, National symposium on "Safe Meat For Good Health And Environment" 4<sup>th</sup> & 5<sup>th</sup> July Dept. of LPT. Veterinary College, KVAFSU, Hebbal, Bangalore-24. HSI:49, Pp:199
- 9) Anuradha E. Menon and Placid E. D'Souza (2009). Studies on immune response to anticoccidial vaccination in broiler breeder chicken XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009 Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. O:132, Pp:113
- 10) Arun M. Dafedar and Placid E. D'Souza (2009). Serodiagnosis of *Sarcocystis capracanis* infection in Goats with ELISA and CIEP. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. O:133, Pp:114
- 11) G.S. Mamatha, Placid E. D'Souza, M. Nagesh, and S.C. Chandrashekar (2009). Prevalence of nematophagous fungi in fresh faeces of Cattle from Bangalore,



South India and in vitro studies on growth assay of *Arthrobotrys oligospora*  
XIX National Congress of Veterinary Parasitology and National Symposium  
on “National Impact of Parasitic Diseases on Livestock Health and  
Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of  
Veterinary Sciences, GADVASU, Ludhiana. OE:21, Pp:35

- 12) H.K.M. Rekha, G.C. Puttalakshamma, K.J. Ananda and Placid E.D'Souza (2009). Hematological and biochemical changes due to Cryptosporidiosis in bovines XIX National Congress of Veterinary Parasitology and National Symposium on “National Impact of Parasitic Diseases on Livestock Health and Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. PE:04, Pp:49
- 13) K.J. Ananda, Placid E.D'Souza and V.V.S. Suryanarayana (2009). Detection of Echinococcus granulosus specific antibodies by indirect enzyme linked immunosorbent assay in dogs. XIX National Congress of Veterinary Parasitology and National Symposium on “National Impact of Parasitic Diseases on Livestock Health and Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. O:118, Pp:107
- 14) K.J. Ananda, Placid E.D'Souza, V.V.S. Suryanarayana and Shrikrishna Isloor (2009). Immunoreactive polypeptides identified in Echinococcus granulosus of dogs by enzyme immunotransfer blot. XIX National Congress of Veterinary Parasitology and National Symposium on “National Impact of Parasitic Diseases on Livestock Health and Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. O:119, Pp:107
- 15) K.J. Ananda, Placid E.D' Souza, P.R. Prathiush and G.C. Puttalakshamma (2009). Immunodiagnosis of Echinococcus granulosus infection in dogs by counter immuno-electrophoresis. XIX National Congress of Veterinary Parasitology and National Symposium on “National Impact of Parasitic Diseases on Livestock Health and Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:11, Pp:119
- 16) K.J. Ananda, Placid E.D' Souza, P.R. Prathiush (2009). Detection of Echinococcus granulosus specific Antibodies in dogs by latex agglutination test using fecal supernatant antigen. XIX National Congress of Veterinary Parasitology and National Symposium on “National Impact of Parasitic Diseases on Livestock Health and Production” 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:12, Pp:120

- 17) K. J.Ananda, Placid E.D'Souza, P.R. Prathiush, and G.C. Puttalakshamma (2009). Serodiagnosis of *Echinococcus granulosus* infection in dogs by dot-elisa using fecal supernatant antigen XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:13, Pp:120
- 18) H.K.M. Rekha, G.C. Puttalakshamma, K.J. Ananda and Placid E.D'Souza (2009). Comparison of different techniques for the detection of cryptosporidiosis in bovines. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:14, Pp:120
- 19) K.J. Ananda, Placid E.D'Souza and V.V.S. Suryanarayana (2009). Cross reactivity of *E.granulosus* with *T.hydatigena* and *D.caninum* of dogs by enzyme immunotransfer blot. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:15, Pp:121
- 20) K.J. Ananda, Placid E.D'Souza and V.V.S. Suryanarayana (2009). Seroprevalence of *Echinococcus granulosus* infection in dogs by enzyme immunotransfer blot. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:16, Pp:121
- 21) K.J. Ananda, Placid E.D'Souza and V.V.S. Suryanarayana (2009). Seroprevalence of *Echinococcus granulosus* infection in dogs by enzyme immunotransfer blot with fecal Supernatant antigen. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. P:17, Pp:121
- 22) Placid E.D'Souza (2009). Advances in the diagnosis, treatment and control of *Taenia solium* cysticercosis in man and pigs. XIX National Congress of Veterinary Parasitology and National Symposium on "National Impact of Parasitic Diseases on Livestock Health and Production" 03.02.2009 to 05.02.2009. Dept. of Parasitology, College of Veterinary Sciences, GADVASU, Ludhiana. ILZ:4, pp:134-143

- 23) Placid E.D'Souza, 2010 Cophylogeny in parasitism. XX National Congress of Veterinary Parasitology, 18.02.2010 to 20.02.2010. Department of Veterinary Parasitology, CCS Haryana Agricultural University, Hisar. Pp: 5-6
- 24) Raju Metri, Placid E. D'Souza, H.N. Narasimhamurthy and B. Umakanta, (2010). Current status of the efficacy of three commonly used coccidiostats in *E.tenella* infection in broiler chickens. XX National Congress of Veterinary Parasitology, 18.02.2010 to 20.02.2010. Department of Veterinary Parasitology, CCS Haryana Agricultural University, Hisar. Pp:48
- 25) Pradeep B.S., Renukprasad, C. and Placid E. D'Souza, (2010). Evaluation of the efficacy and resistance development of some commonly used acaricides against different stages of *Rhipicephalus sanguineus* by *in vitro* tests. XX National Congress of Veterinary Parasitology, 18.02.2010 to 20.02.2010. Department of Veterinary Parasitology, CCS Haryana Agricultural University, Hisar. Pp:64
- 26) P.M. Kondaiah and Placid E. D'Souza, (2010). Evaluation of six techniques in the detection of *Trypanosoma evansi* infection in bovines in endemic regions of Karnataka. XX National Congress of Veterinary Parasitology, 18.02.2010 to 20.02.2010. Department of Veterinary Parasitology, CCS Haryana Agricultural University, Hisar. Pp:32
- 27) P.M. Kondaiah and Placid E. D'Souza, (2010). Epidemiology of trypanosomosis in bovines from endemic regions of Karnataka state. XX National Congress of Veterinary Parasitology, 18.02.2010 to 20.02.2010. Department of Veterinary Parasitology, CCS Haryana Agricultural University, Hisar. Pp:15
- 28) Placid E.D'Souza (2010).Ectoparasitic infestations as an emerging problem in commercial poultry operations. Invited paper in National Seminar on Integrated management of Arthropod pests of livestock and poultry in the aftermath of global warming and climate change. 21<sup>st</sup>.& 22<sup>nd</sup>. April 2010. Dept.of Veterinary Parasitology, VCRI,TANUVAS,Namakkal,pp. 28-31
- 29) Placid E.D'Souza , Pradeep B.S. and Renukprasad C. (2010). In vitro evaluation of the efficacy of a new biocide Indispron D-110 against some commonly occurring ticks. National Seminar on Integrated management of Arthropod pests of livestock and poultry in the aftermath of global warming and climate change. 21<sup>st</sup>.& 22<sup>nd</sup>. April 2010. Dept.of Veterinary Parasitology, VCRI,TANUVAS,Namakkal,pp. 64
- 30) Placid E.D'Souza, (2011). Towards strengthening of teaching, research and creation of a national museum of veterinary Parasitology. XXI National Congress of Veterinary Parasitology, 05.01.2011 to 07.01.2011, S3-LP2, pp

95-103. Department of Veterinary Parasitology, Bombay Veterinary College, Mumbai.

31) M. Veena, Placid E. D'Souza, G.S. Sreenivasa Murthy and C. Renuka Prasad, (2011). Serodiagnosis of cryptosporidiosis in cattle by IFAT. XXI National Congress of Veterinary Parasitology, 05.01.2011 to 07.01.2011, S1-033, pp 40. Department of Veterinary Parasitology, Bombay Veterinary College, Mumbai.

32) H.K.M. Rekha, G.C. Puttalakshamma, K.J. Ananda and Placid E. D'Souza, (2011). Detection of cryptosporidium infection in calves by negative staining methods. XXI National Congress of Veterinary Parasitology, 05.01.2011 to 07.01.2011, S1-P9, pp 51-52. Department of Veterinary Parasitology, Bombay Veterinary College, Mumbai.

33) Nazir Ahmad Tookhy, Placid E. D'Souza and G.S. Sreenivasa Murthy, (2011). Studies on gastrointestinal parasitic infection in goats – an abattoir study. XXI National Congress of Veterinary Parasitology, 05.01.2011 to 07.01.2011, S1-P22, pp 58. Department of Veterinary Parasitology, Bombay Veterinary College, Mumbai.

34) Placid E. D'Souza , (2011). Guest lecture at the College of Veterinary Science at Tirupati on “Ethics of research publications in Veterinary Science” on 29.3.2011.

**Financial Statement**  
**Expenditure under CAFT during XI plan**

Head	2007-08	2008-09	2009-10	2010-11	2011-12
Operating cost of Training	nil	347779	107439	225112	
Recurring Contingency	nil	194353	146782	199748	
Non- Recurring Contingency	nil	nil	nil	nil	
T.A.	nil	29743	11433	17242	
Library	nil	41503	30000	29970	
Staff salaries	nil	80082	5352	15800	
TOTAL	0	693460	301006	487872	