



Proposed design of new building of PD_ADMAS at Yelahanka, Bangalore



हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

AgriSearch with a human touch



PD_ADMAS

News

Vol. 2, No. 2

www.pdadmas.ernet.in

Jul - Dec, 2012



From the Director's Desk....

Happy and Prosperous New Year-2013

We have completed successfully one more year with some contribution to the livestock health and stepping into XII plan programmes. The 18th Livestock census was the major task taken up last year by the Govt. of India to update the population status and hope there is an increasing trend in both population and production. In order to increase the milk and meat production to meet the demands of the country as per Vision 2050, there is a need to address the health management of livestock. Livestock are affected by number of diseases causing hindrance in their productivity. We are fairly comfortable in diagnostics with regard to livestock diseases but more efforts are needed to achieve in control and eradication of animal diseases. Laying down a road map and designing of proper disease control programme is a tricky task. Modelling of infectious diseases, their transmission and control is the first step towards prevention and control of livestock diseases.

This Directorate is striving hard to develop various models in understanding the animal disease transmission, control and prevention methodologies by developing the linkages with RDDs, State disease diagnostics laboratories and extending its AICRP network to 16 more new centers that leads to one centre in each state.

Honourable Minister of Animal and Fish Resources, Govt. of Bihar visits PD_ADMAS



Shri. Giriraj Singh, Hon. Minister of Animal and Fish Resources, Govt. of Bihar paid an official visit to the Directorate on 11th October 2012. He was shown the activities of the Directorate by Dr. M. R. Gajendragad, Principal Scientist and in charge, Project Director. Later on Dr. Gajendragad presented the National scenario on monitoring and surveillance of livestock diseases with special reference to Bihar state. Mr. Singh while addressing the scientists appreciated the activities of the Directorate and promised to get livestock disease data from Bihar state.



Classical swine fever outbreak investigation by Scientists of the institute at Nijagal Kempohalli, Tumkur, Karnataka

Training programme on Research Methodology and Biostatistics



One day training programme on Research Methodology and Biostatistics was organized on 28th July 2012 for researchers and academicians. The programme was inaugurated by Dr. C. S. Prasad, Director, NIANP, Bangalore and he appreciated the topic of the programme which is need of the hour. Dr. Prasad reiterated that such programmes should be conducted on regular interval to refresh the academicians and scientists. Dr. H. Rahman, Project Director said that this programme on research methodology is one of series of lectures which are being conducted in the Silver Jubilee celebration of the foundation of the Directorate. Dr. Chandrashekhar Murthy, President, KVC, Bangalore also graced the occasion. Dr. M. R. Gajendragad, Course Director delivered lecture on application of Biostatistics in animal science research. Dr. K. P. Suresh, Scientist delivered lectures on different topics of Biostatistics. Dr. D. Hemadri, Principal Scientist and Dr. S. S. Patil, Sr Scientist also delivered lectures on different topics. The topics discussed were samples size estimation, study power calculation, randomization procedures, sampling techniques, descriptive statistics, good laboratory practices and thumb rules for writing research articles. The programme was attended by 25 participants of ICAR and SAUs.



PPR outbreak investigation by the Scientists of the institute at Mulabagilu, Kolar, Karnataka

Bovine Mastitis: Unraveling molecular details of host-microbe interaction and development of molecular diagnostics (NAIP Sub-Project)

Salient Achievements

Epidemiology:

1. *Staphylococci* are the primary cause of mastitis in India. Of staphylococci, coagulase negative *staphylococci* (CoNS) are emerging pathogens. To a lesser extent, in herd specific manner uniquely evolved *S. agalactiae* (ST483) are important in mastitis. *E. coli* associated with mastitis are genetically highly diverse.
2. *S. aureus spa* type t267 was identified as clonal ancestor of all *S. aureus* associated with bovine subclinical mastitis. *S. aureus* t6877, a single base variant of t267 and highly efficient in cell adhesion belonging to *agr* type I has been found to be very highly immunogenic thus making it a likely vaccine candidate for staphylococcal mastitis.

Diagnosis:

1. A diagnostic mPCR assay capable of simultaneous detection of ten major pathogens directly from milk by two tube method (*S. epidermidis*, *S. haemolyticus*, *St. agalactiae*, *St. uberis*, *S. simulans*, *S. chromogenes*, *S. sciuri*, *E. coli*, *St. dysgalactiae* and *S. aureus*) in less than 6 hours has been developed.
2. A diagnostic mPCR assay for identification of five important *Staphylococcus* spp. (*S. aureus*, *S. chromogenes*, *S. epidermidis*, *S. sciuri* and *S. haemolyticus*) and a diagnostic mPCR assay for identification of three important *Streptococcus* spp. (*St. agalactiae*, *St. uberis*, *St. dysgalactiae*) have been developed .
3. Based on the recombinant protein designated as POLYVALENT IMMUNOGENIC BOVINE BIOMARKER (PIBB), liquid phase blocking ELISA (LPB-ELISA) was developed for detection of sub-clinical mastitis. Patent on "A novel Biomarker based detection of bovine sub-clinical mastitis" has been filed (Patent application number: 3807/DEL/2011 Dated 26.12.2011)
4. Designed a biochip which is capable of detecting mastitis causing pathogens viz. *S. aureus* and *Streptococcus* spp. viz. *St. agalactiae*, *St. dysgalactiae*, and *St. uberis*, and *E. coli* and specific virulence genes.

Host-microbe interaction:

1. Host immune gene expression in response to intramammary infection by *E. coli*, *S. aureus*, *S. agalactiae* and *S. uberis* in mice have been found to be not only temporal but also species and strain specific.

The host response is more complex than dependent on mere presence of a specific or a set of virulence genes in causal agent.

- In *S. aureus* and *E. coli* IMI in mice, a positive correlation was identified between Histone hyperacetylation (H3K14Ac and H4K8Ac) and mastitis, which is mediated through modifying enzyme p300 (NFκB-p300 signalling cascade), a novel target for nonantibiotic mediated therapeutics in mastitis.

Drug delivery vehicle:

- Self fluorescent carbon nanosphere (CSP) derived from glucose was very efficient in crossing blood-milk barrier and distribution across intracellular environment in mice udder, which paves the way for targeted delivery of CSP-inhibitors of histone acetyltransferase p300 conjugate to mammary tissues as novel therapeutic strategy in mastitis.

Celebration of Hindi Saptaha

Hindi Saptah was celebrated for one week from 14th September, 2012 in this Directorate. Various activities in Rashtra Bhasha like Essay writing, Quiz, Debate, Ashu Bhashan and Solo songs etc., were organized by Dr. D. Hemadri, PS and Hindi Officer. Dr. H. Rahman, Project Director, inaugurated the Hindi Saptah and reiterated that all should practice use of Hindi language in daily activities. Dr. S.S. Patil, Sr. Scientist bagged many awards and he was honoured with “Hindi Vidwan” medal and Smt. Susweta D Mitra, Research Associate, bagged “Hindi Vidushi” award.



Dr. S.S.Patil, Sr. Scientist receiving “Hindi Vidwan” award from Dr. H. Rahman, Project Director, PD_ADMAS.



Smt. Susweta D Mitra receiving “Hindi Vidushi” award from Dr. H. Rahman, Project Director, PD_ADMAS.

Dr. H. Rahman honoured with “Falvey Award”



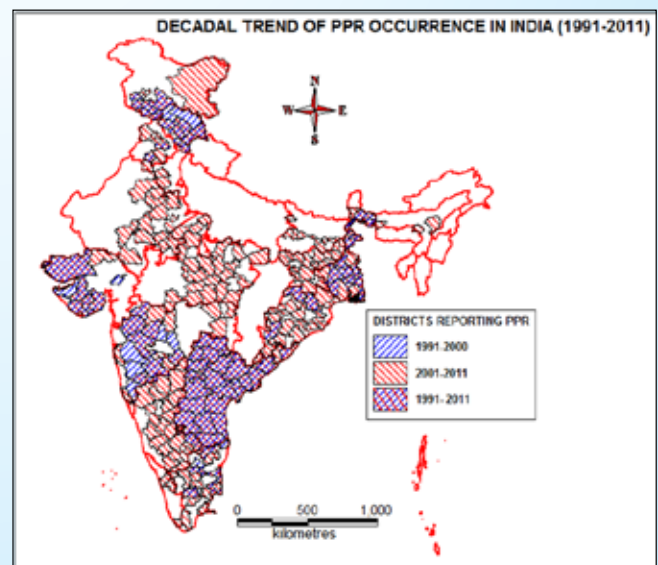
Dr. H. Rahman, Project Director, PD_ADMAS, Bangalore along with his team has been awarded the prestigious “Falvey Award 2012” by the Asian Agri-History Foundation, India for

their **Best Paper** “Traditional Breeding Management of Yak (*Poephagus grunniens*) in North Eastern Hill Region of India” published in the Journal Asian Agri-History Volume 16, 2012.

The Award consists of a cash prize of Rs.10,000 and a certificate to all authors. The Award has been instituted through a donation by Prof Lindsay Falvey and Ms Simone Falvey.

Peste des petits ruminants (PPR) Epidemiology

The epidemiology of PPR in India (from 1991 to 2011) has been constructed based on the disease records available in NADRES, PD_ADMAS. NADRES is a computerized database of monthly disease reports provided by different state AH departments and collaborating units of AICRP on ADMAS. The decadal trend of PPR outbreaks has been depicted in the different zones and states on the country, which showed that increased number of districts was affected during 2001-2010 compared to the previous decade. Variation in the annual occurrence of the disease may be the result of various factors, including host, agent or environmental factors. It is still not clear whether the apparent geographical spread of the disease in the last two decades is real or reflects increased awareness, wider availability of diagnostic tools or even a change in the virulence of the virus. It seems most likely that combinations of these factors are responsible for the present knowledge of the disease distribution.



Bayesian Bio-surveillance of disease outbreaks

Early and reliable detection of disease outbreak of diseases is critically important today. We need to detect outbreaks as early as possible to provide the best response and treatment, as well as to improve the chance of identifying the source. Outbreaks often present signals that are weak and noisy early in the event. If we hope to achieve rapid and reliable detection, it is necessary to integrate multiple weak signals that together provide relatively stronger signal of an outbreak. Combining spatial and temporal data is an important instance of such integration. Because of the noise in signals early in the event, early detection is almost detection under uncertainty. One of the most measures of uncertainty is probability. A well organized probabilistic approach allows for a rational combination of multiple, small indicators into a big picture. Since the modeling of risk factors, disease and symptoms often is causal, researcher can use causal Bayesian networks as probabilistic modeling method. Bayesian networks comprise an established, unifying framework that is recognized in the field of epidemiology as a promising approach to epidemiological modeling.

Given the current data about individuals in the population, use of Bayesian network enables to infer the posterior probabilities of outbreak of diseases in the population. To provide timely detection, inference needs to be performed in real time, such that the bio-surveillance system keeps up the data streaming in. Once the probability of outbreak exceeds a particular threshold, an alert is generated by the Bayesian-network-based bio-surveillance system. The key point in this approach is the explication of assumptions and techniques that are sufficient to allow the scaling of Bayesian network modeling and inference to millions of nodes for real-time surveillance applications, thus providing a proof-of-concept that Bayesian networks can serve as the foundation of a system that effectively performs the Bayesian surveillance of disease outbreaks.

A Bayesian network is a graphical model that encodes probabilistic relationship among variables of interest. When used in conjunction with statistical techniques, the graphical model has several advantages for data analysis. (1) Because the model encodes dependencies among all variables, it readily handles some data entries that are missing. (2) A Bayesian network can be used to learn causal relationships, and hence can be used to gain understanding about a problem domain and to predict the consequences

of interventions. (3) Because the model has both a causal and probabilistic semantics, it is an ideal representations for combining prior knowledge and data. (4) Bayesian statistical methods in conjunction with Bayesian networks offer an efficient and principled approach for avoiding the over fitting of the data. There is no need to hold out some of the available data for testing and using Bayesian approach, models can be smoothed in such a way that all available data can be used for training.

Dr. H. Rahman, Project Director visited University of Utah, USA

Dr.H.Rahman, Project Director, PD_ADMAS, Bangalore and a recipient of DBT. CREST Fellowship worked as a visiting researcher in the University of Utah, Salt Lake City, Utah, USA project on entitled “**Development of Flagellar Nanotubes to be used as Salmonella Vaccine**” for 3 months with effect from 27th September, 2012. Dr.H.Rahman, has worked on the following aspects of vaccine development:

1. Generated minicells with expression of HA antigen (influenza virus) and standardized the protocol for production and segregation of minicells from parent cells. Also demonstrated the expressions of HA antigen with anti-HA antibody kits in the absence of experimental animal model.
2. Constructed Salmonella cells for expression of different antigenic epitopes like HA antigen and Cj0 113 antigen (OMP) of *Campylobacter jejuni* in the different flagellar proteins (Flg E, Flg G, and Flg I) to be used as vaccine.
3. Constructed *aroA* gene deleted Salmonella cells to be used as vaccine.



Epidemiological investigation of suspected cases of Malignant Catarrhal Fever (MCF)

Team consisting of Dr. Divakar Hemdri, Principal Scientist, Dr. S.S.Patil, Dr. V. Balamurugan, Senior Scientists of PD_ADMAS and Dr. Richa Sood, Sr Scientist and Dr Manoj Kumar, Scientist of HSADL, Bhopal visited Bannerghatta Zoological Park & villages of Anekal Taluka of Bangalore District for epidemiological investigation of suspected cases of MCF in sheep, cattle and zoo animals.



Scientists interacting with Chief Conservator of Forests, Bannerghatta Zoological Park, Bangalore

Celebration of Institute's Foundation Day

On 1st July 2012, Institute's Foundation Day was celebrated with activity of planting saplings of trees at Yelahanka site, Bangalore wherein proposed new building is to be constructed.



Dr M. R. Gajendragad interacting with NDDB personnels regarding construction of new laboratory cum administration building at Yelahanka, Bangalore. Shri. Nema and Shri. Bose from NDDB, participated in the meeting.

PD_ADMAS team visits Karsingsa Nirjuli, Arunachal Pradesh

Dr. D. Hemadri, Principal Scientist and Dr. S. S. Patil Sr. Scientist Visited the Central Pig Breeding Farm (CPBF) Karsingsa Nirjuli, Arunachal Pradesh during August 13-16, 2012 to investigate disease that affected Pigs causing deaths. During the investigation the team also came to know that exchange of Pigs occurs regularly among the farms located in various parts of the NE states and sometimes from as distant place as Kerala. The CPBF, Karsingsa has procured Pigs from Regional Exotic Pig Breeding Farm, Loiliang, Tezu, Arunachal Pradesh during June 2011 and January 2012. The said farm obtains Pigs regularly from Kyrdemkulai farm, which had outbreaks of CSF during later part of last year and the latest procurement of pigs was during April, 2011. Blood, Serum and tissue samples from the representative Pig population were collected. The Pigs were found positive for both antibody and antigen of Classical swine fever.



Dr. Divakar Hemadri, Principal Scientist and Dr. S. S. Patil, Sr. Scientist of this Directorate along with Dr. Basar, Dr. Badal and Dr. Panor, Veterinary Officers of Central Pig Breeding Farm, Karsingsa, Nirjuli, Arunachal Pradesh.



Dr. M. Moni, DDG (NIC) interacting with the participants in the Trainers training programme on NADRS at NIC, New Delhi. Dr M.R. Gajendragad and Dr Divakar Hemadri, Principal Scientists participated in the programme.

National Control Programme on Brucellosis (NCPB) in India

Brucellosis is an important zoonotic disease and causes huge economic losses to livestock industry and public health. The aim of NCPB is to reduce the disease impact on human health and to reduce economic losses. NCPB is a five year intensive location targeted control programme sanctioned by DADE, GOI and PD_ADMAS has been entrusted with the objectives to supply ELISA diagnostics to laboratories of States and Union Territories, to provide confirmatory diagnosis of the samples and to conduct sensitization training programme for State Veterinary Officers for effective implementation of the programme. The road map for the programme is designed by Dr. H. Rahman, Project Director, PD_ADMAS. In this direction Dr. Rajeswari Shome, Senior Scientist and Dr. M. Nagalingam, Scientist of the Directorate imparted training/workshop to the State Veterinary Officers of Chennai (Tamilnadu), Raipur, (Chhattisgarh) and Bhopal, (Madhya Pradesh)



NCPB training to State Veterinary Officers on 26.11.12 at Chennai, Tamil Nadu



NCPB training to State Veterinary Officers on 26.09.12 at Raipur, Chhattisgarh.

Interface meeting at KVK of Zone VII, Jabalpur

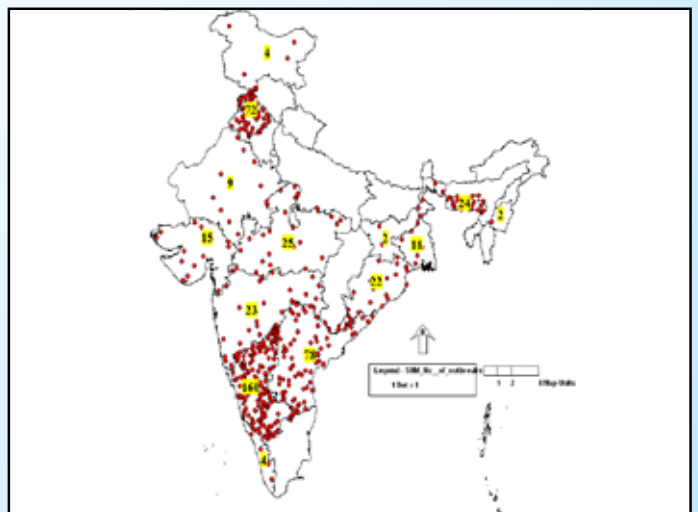
An interface meeting of the Veterinarians with PD_ADMAS was organized by Dr. A. Mishra, Zonal Project Director, KVK of Zone VII, Jabalpur. 16 KVKs participated in the meeting. The meeting was inaugurated by Dr. K. K. Saxena, DES, KNKV, Jabalpur and presided over by Dr. A. Mishra. Dr. M. R. Gajendragad Principal Scientist, Dr. V. Balamurugan, Sr. Scientist, PD_ADMAS and Dr. J. Tapase, Co-PI AICRP on ADMAS, Bhopal participated in the meeting.

Dr. M. R. Gajendragad presented a brief on the institute activity with special emphasis on the epidemiological activities of AICRP and briefed about NADRES and its usefulness. He proposed that all KVKs to participate in the disease surveillance programme of PD_ADMAS by sending the livestock disease information report from their respective operational villages. Dr. Mishra, Vice Chancellor of Kamadhenu Vishwavidyalaya also attended the meeting.



Dr. M. R. Gajendragad, Principal Scientist and Dr. V. Balamurugan, Sr. Scientist interacting with the Veterinarians working at the KVK of Zone VII, Jabalpur.

Haemorrhagic Septicemia outbreaks occurred in different state of India during 2010-11.



Economics of Animal Diseases: Typology of Approaches

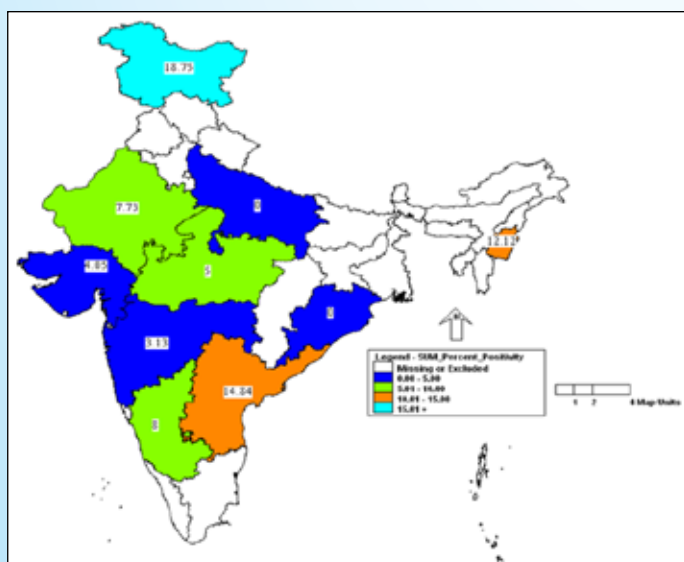
Animal disease outbreaks are significant threat to the animal product marketing sector because the impacts of an outbreak can be quite costly and far reaching. From a public perspective, policy makers seek an accurate assessment of losses due to animal disease when weighing disease prevention and mitigation alternatives. Immediate impacts of a disease outbreak include a reduction in the productive capacity of the animal products industry and a subsequent reduction in the supply of livestock products. Allied agribusinesses bear an initial loss in the supply of livestock products, and later increased costs when locating and certifying safe food supplies.

Disease impacts are generally easy to identify but may be difficult to quantify. In livestock for example, delays in reproduction result in fewer offsprings, which has long term effects not easily measured in the present. Disease outbreaks often have broader, longer term multiplier effects that extend beyond principal markets. The following table summarizes various aspects in the economics of animal disease typology matrix that encompasses different assessment methods for different objectives and scope.

Economics of Animal Disease Typology Matrix

Scope of Analysis	Research Objectives	Assessment Methods	Policy Instruments
Producer Impacts	Business Loss, Incentives for Control	Budgeting, Stochastic Simulation	Compensation, Testing
Allied Agribusiness, Processors, Suppliers and Supporting Activities	Lost Shareholder Wealth, Business Loss	Efficiency Analysis, Event Analysis	Production Practices, Certification, Traceability
Consumer	Welfare Loss, Risk Assessment	Partial Equilibrium, Contingent Valuation Method, Willingness to Pay	Education Certification, Information
Sector	Industry Losses	Simulation, Efficiency Estimation	Traceability, Certification
Regional	Welfare Impact, Industry Specific Loss, Inadvertent Loss	I-O Models, Computable general equilibrium (CGE) models	Movement Restrictions, Compensation, Prescribed Cull
National and International	Welfare Impact, Distribution of Loss	Partial Equilibrium, CGE models	Regionalization, Rapid Response Plans, National ID, Tariffs/Non Tariff Barriers, Restrictions

Seroepidemiology of Brucellosis in Sheep by indirect ELISA (2006-12)



Classical swine fever outbreak investigation by the Scientists of the institute at Nelamangala, Bangalore

Kisan Goshthi organized

PD_ADMAS, Bangalore and Kolkata unit, AICRP on ADMAS jointly organized a 'Kishan goshti' in the Joypur village of Amta-2 block in Howrah district, West Bengal on 17.12.2012. 45 farmers and 15 public representatives attended the meeting. Chairman of local Panchayat Samiti, Mrs. Namita Shil was also present in the meeting. Dr. P. P. Sengupta, Senior Scientist, PD_ADMAS, Bangalore and Dr. T. S. Pan, Co-PI, Kolkata unit, AICRP on ADMAS were in the expert panel. Different problems of local farmers related to dairy cattle, broiler/layer bird, goat, and rabbit rearing were addressed by expert panel. A letter of recommendation from local veterinary authority addressing the solution has been sent to the state veterinary authority.



A farmer is presenting a problem before the expert panel in the meeting of Kisan Goshthi at Joypur village of Howrah district, West Bengal Dr P P Sengupta, Senior Scientist participated in the programme

Institutional Animal Ethics Committee meeting (IAEC)

IAEC meeting of PD_ADMAS was held on 15th September 2012 in the conference hall. The following members attended the meeting: Dr. H. Rahman, Project Director and Chairman, Dr. S. G. Ramachandra, CPCSEA Nominee, Dr. Vishwanath Bhagwat, Sr. Research Scientist, Himalayan Herbal Healthcare Mr. D. Prahallada, Non-Scientific socially aware member, Dr. Divakar Hemadri, Principal Scientist, Dr. P.P. Sengupta, Senior Scientist and Dr. P. Krishnamoorthy. Scientist and Member Secretary. Four project proposals submitted by Scientists, PD_ADMAS were presented, discussed and approved by the committee.

FAO sponsored Workshop on Surveillance & Epidemiology on Animal Diseases

FAO sponsored Workshop on Surveillance & Epidemiology on Animal Diseases was jointly organised by PD_ADMAS, HSADL & FAO at Bhopal from 28th to 30th August 2012 for Principal Investigators of AICRP on ADMAS, PD_ADMAS & Scientists of HSADL. Dr. J. M. Kataria, Joint Director welcomed the participants. Dr. H. Rahman, Project Director appraised the importance of the topic. Dr. A. B. Negi, Dr. Paul White, Dr. John Weaver, Dr. Madhura Dingra of FAO & Dr. D. Hemadri of PD_ADMAS delivered the lectures on epidemiology.



Bird Flu Outbreak in Central Poultry Development Organization and Training Institute, Hessarghatta, Bangalore

FAO Expert Team visited CPDO&TI, Hessarghatta, Bangalore to conduct outbreak investigation of avian influenza in Central Poultry Development Organization and Training Institute (CPDO&TI), Hessarghatta, Bangalore during 21st to 23rd November, 2012.

The Expert Team comprised of the members: Dr. A. B. Negi – Team Leader and National Project Coordinator (ECTAD-India), Dr. Vikram Singh Vashist – Epidemiologist (ECTAD-India), Dr. S. Nagarajan, Sr. Scientist, HSADL, Bhopal, Dr. M.D. Venkatesha, Director, SRDDL, Bangalore, Dr. S.S.Patil & Dr. B. Ganesh Kumar, Sr. Scientists, PD_ADMAS, Bangalore and Dr. Sanjeev Kumar, Scientist, SRDDL, Bangalore.



Microscopic Agglutination Test (MAT) Facility

PD_ADMAS has established the microscopic agglutination test (MAT) facility for seroprevalence monitoring of the leptospirosis in bovine or other livestock species. Serum samples from coastal region of Maharashtra were subjected to MAT using 8 reference serover antigens viz., Australis, Bankinang, Canicola, Hardjo, Hebdomadis, Icterohaemorrhagiae, Pyrogens, Tarassovi, representing the serogroups Australis, Autumnalis, Canicola, Sejroe, Hebdomadis, Icterohaemorrhagiae, Pyrogens, and Tarassovi, respectively. The serovars selected cause disease in cattle or may be of use as sentinel serovars to measure the potential spread.

The overall seroprevalence of leptospirosis was found to be 27% (123/447 samples reacted in MAT) with 31.6% in buffaloes, 25% in cows, 27.8% in bullocks and 22.4% in bulls. The predominant leptospira serogroup antibodies was against Australia (26%) followed by Sejroe (22.7%), Hebdomadis (19.5%), Autumnalis (15.4%), Icterohaemorrhagiae (12.1%), Tarassovi (8.9%), Pyrogens (8.1%) and Canicola (7.3%). Out of 123 reacted samples, 15 samples showed reaction with more than one serovars representing 12.5 % highly reactive serogroups. Of three districts of coastal region, high seroprevalence of leptospira antibodies were observed in Thane (33%= 76/230) followed by Sindhudurg (24.2%=38/157), and Raigad (15%=9/60) districts of Konkan region of Maharashtra.

In conclusion, the coastal region of Maharashtra is the endemic zone for leptospirosis as indicated by the high seroprevalence on screening for MAT. The high seroprevalence of *Leptospira* spp. in apparently healthy bovine indicates the presence of this agent in the environment, which may be a source of human infection. Knowledge of the serovars is important for understanding the epidemiology of leptospirosis and establishing public health policies aimed at its control.

New Projects Sanctioned

DBT Network Project on Brucellosis

Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India has sanctioned a DBT Network Project on Brucellosis involving 15 collaborating centers with five subprojects: to study the epidemiology of Brucellosis in animals and humans, to develop recombinant *Brucella* vaccines, to develop rapid *Brucella* diagnostic tests, to establish *Brucella* repository and to understand the

genomics and proteomics of *Brucella* spp (bioinformatics) for 3 years (DBT Network Project on Brucellosis/2012 dated 08.10.12). Project Directorate on Animal Disease Monitoring and Surveillance (PD_ADMAS), Bengaluru (Project Monitoring Unit; PMU) has been entrusted with overall coordination and monitoring of research progress of all the 15 collaborating centers. The network project will help in better understating of epidemiology, diagnosis and disease informatics which will further contribute in designing prevention and control strategies for making *Brucellosis* free India in future.

DBT-Twinning Programme

College of Veterinary Sciences, Guwahati in collaboration with PD_ADMAS, Bangalore have been jointly awarded with the project on "Sero surveillance and association of Toll-like receptors, Th1-Th2 status and Viral Genotypes in susceptibility and severity of PPR among goats and sheep of North East India" under DBT-Twinning programme for North Eastern Region (BT/376/NE/TBP/2012 dated 30-11-2012).

Workshops/Conferences/ Trainings attended

Dr. K. P. Suresh, Scientist delivered lecture on "Research Methodology, Data Management and Bio-statistics" on 4-5 August 2012 conducted by CHANRE Health Care and Research Pvt. Ltd at Bangalore.

Dr. H. Rahman, Project Director, Dr. M. R.Gajendragad & Dr. D. Hemadri, Principal Scientists attended "FAO sponsored workshop on Surveillance & Epidemiology on Animal Diseases" from 28th to 30th August 2012 at Bhopal.

Dr. V. Balamurugan, Senior Scientist attended the 5th Bangalore Nano-curtain raiser programme on 28th August 2012 at Bangalore.

Dr. H. Rahman, Project Director, Dr. B. R. Shome, Principal Scientist, Dr. Divakar Hemadri, Principal Scientist, Dr. Rajeswari Shome, Senior Scientist, Dr. B. Ganesh Kumar, Senior Scientist, Dr. V. Balamurugan, Senior Scientist, Dr. S. S. Patil, Senior Scientist, Dr. P. Krishnamoorthy, Scientist and Dr. G. B Manjunatha Reddy, Scientist participated in International Seminar on Future of Livestock Health from 6th to 8th September, 2012 held at TANUVAS, Chennai.

Dr. V. Balamurugan, Senior Scientist presented the project proposal on Monitoring of Leptospirosis in DBT task force meeting on 10th September 2012 held at DBT, Head Quarters, New Delhi.

Dr.M.R.Gajendragad, Principal Scientist attended “The infectious disease epidemiology training programme” conducted for the scientists of RDDs from 12th to 14th September 2012 at HSADL, IVRI, Bhopal.

Dr.M.R.Gajendragad, Principal Scientist and Dr. V. Balamurugan, Senior Scientist attended “An interface meeting of the veterinarians working at the KVK of Zone VII with PD_ADMAS” organized by Zonal Project Director from 4th to 5th October 2012 at Jabalpur.

Dr. P.Krishnamoorthy, Scientist and Dr. G.B. Manjunatha Reddy, Scientist attended 29th Annual convention, National Symposium and Seminar of Indian Association of Veterinary Pathologists from 5th to 7th November 2012 at College of Veterinary Sciences, Hisar, Haryana.

Dr.M.R.Gajendragad, Principal Scientist attended “ILRI- ICAR partnership dialogue on livestock research and development in India” on 7th November 2012 at New Delhi.

Dr. V. Balamurugan, Senior Scientist and Dr. M. Nagalingam, Scientist participated in XXI National Conference on Immunobiology and Management of Viral Diseases in 21st Century in Virocon-2012 from 8th to 10th November 2012 at Mukteswar.

Dr.M.R.Gajendragad and Dr. D. Hemadri, Principal Scientists attended and presented a talk on NADRES and compared it with the NADRS of DADF in “Trainers training programme on NADRS, NIC from 19th to 23rd November 2012 at New Delhi.

Dr.M.R.Gajendragad, Principal Scientist attended “Foundation Day celebration of National Institute of Animal Physiology & Nutrition, Bengaluru.” on 24th November 2012 at Bengaluru.

Dr.M.R.Gajendragad, Principal Scientist participated in the meeting organized on “The instructions of DG ICAR for 12th plan AICRP proposals from 5th to 6th December 2012 at New Delhi.

Dr. G.Govindaraj, Scientist attended and presented paper on “Poultry farming for sustainable livelihood security in north eastern region: An economic analysis in Manipur” in XXIX Annual conference and national symposium of Indian Poultry science association (IPSACON 2012) held from 5th to 7th December 2012 at Hyderabad.

Dr.M.R.Gajendragad, Principal Scientist and Dr. Manjunatha Reddy G.B Scientist participated in Passing out parade of the second batch of handlers and dogs of CRPF

Dog breeding and training school, Taralu on 10th December 2012 at Taralu, Bengaluru.

Dr. P.P.Sengupta, Senior Scientist attended and presented papers on Cloning, sequencing and analysis of Invariant Surface Glycoprotein (ISG-75) gene of Trypanosoma evansi and Highly sensitive PCR assay targeting ISG gene of T. evansi for detecting carrier status of trypanosomiasis for surveillance in 23rd National Conference on Veterinary Parasitology from 12th to 14th December 2012 at Veterinary College, Khanapara, Guwahati, Assam.

Dr. B.R. Shome, Principal Scientist, Dr. Rajeswari Shome, Senior Scientist, Dr. V. Balamurugan, Senior Scientist and Dr. M. Nagalingam, Scientist participated in XI International Conference of IAVPHS on “One health: Way forward to challenges in food safety and Zoonoses in 21st century” from 13th to 14th December 2012 at GADVASU, Ludhiana.

Dr.M.R.Gajendragad, Principal Scientist participated and delivered a lecture in the Group discussion on Animal Science Research for formulating strategies to prepare Roadmap for the 12th Five year plan on 17th December 2012 at Central Agricultural Research Institute, Port Blair, Andaman.

Shri R.K. Babu, AF&AO attended workshop on “Right to Information for PIOs” conducted from 17th to 18th December by Institute of Secretariat Training and Management, Department of Personnel and Training, Ministry of Personnel, Public Grievances & Pensions, Government of India.

Dr. G.Govindaraj, Scientist attended and presented paper on “Households demand and supply projections of major edible oils: A case of Tamil Nadu state” in International conference on statistics and informatics in agricultural research held from 18th to 20th December 2012 at IASRI, New Delhi.

Joinings/Promotions/Transfers

- Shri Rajeevalochana promoted as AAO on 9th July 2012.
- Dr. S. S. Patil, Scientist promoted as Senior Scientist under CAS on 3rd August 2012.
- Shri P. Narender joined as AO on 8th November 2012 consequent upon promotion and transfer from DRR, Hyderabad.
- Dr. R. Sridevi, Scientist joined on 12th December 2012 consequent upon transfer from HSADL, Bhopal.

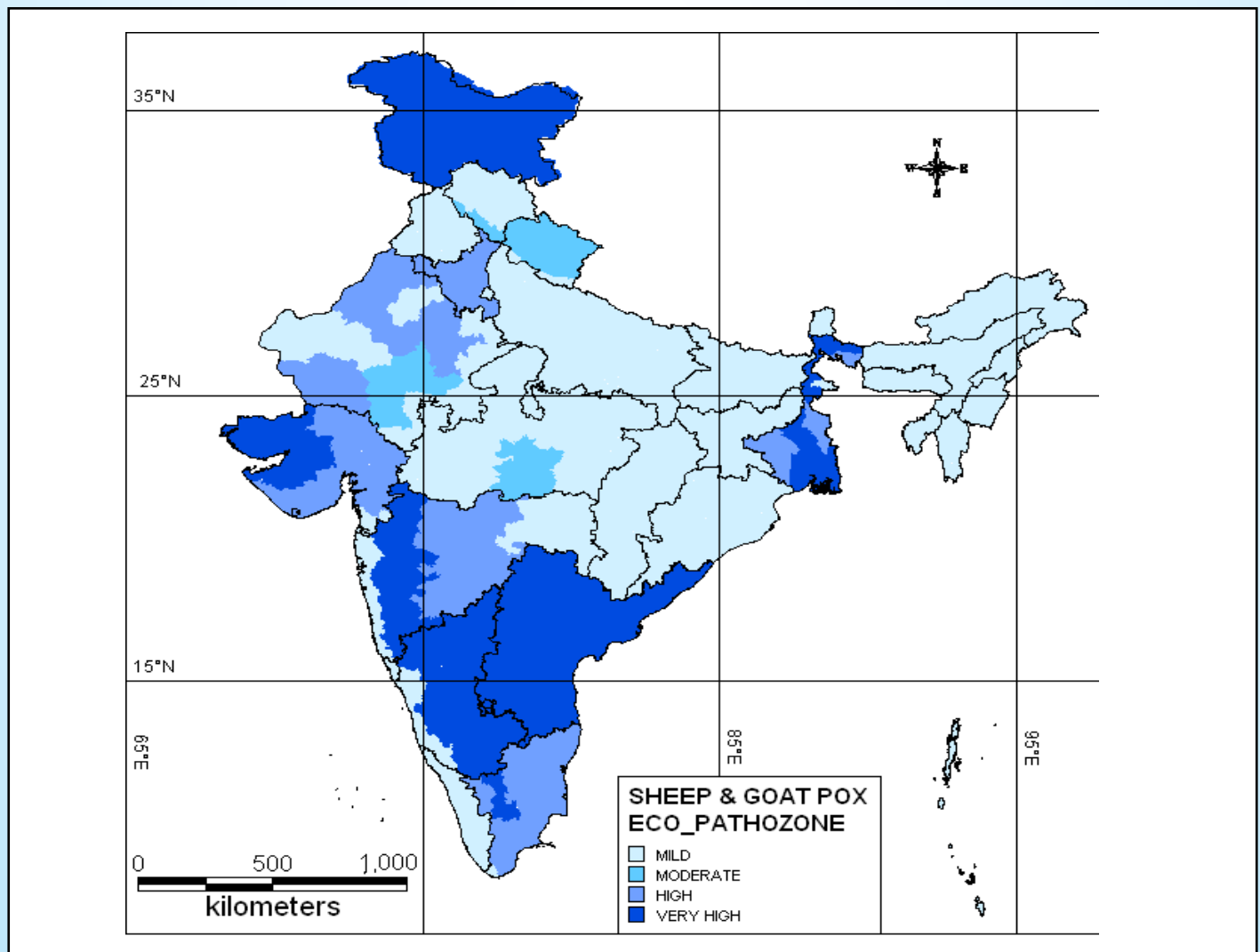
Awards/Recognitions

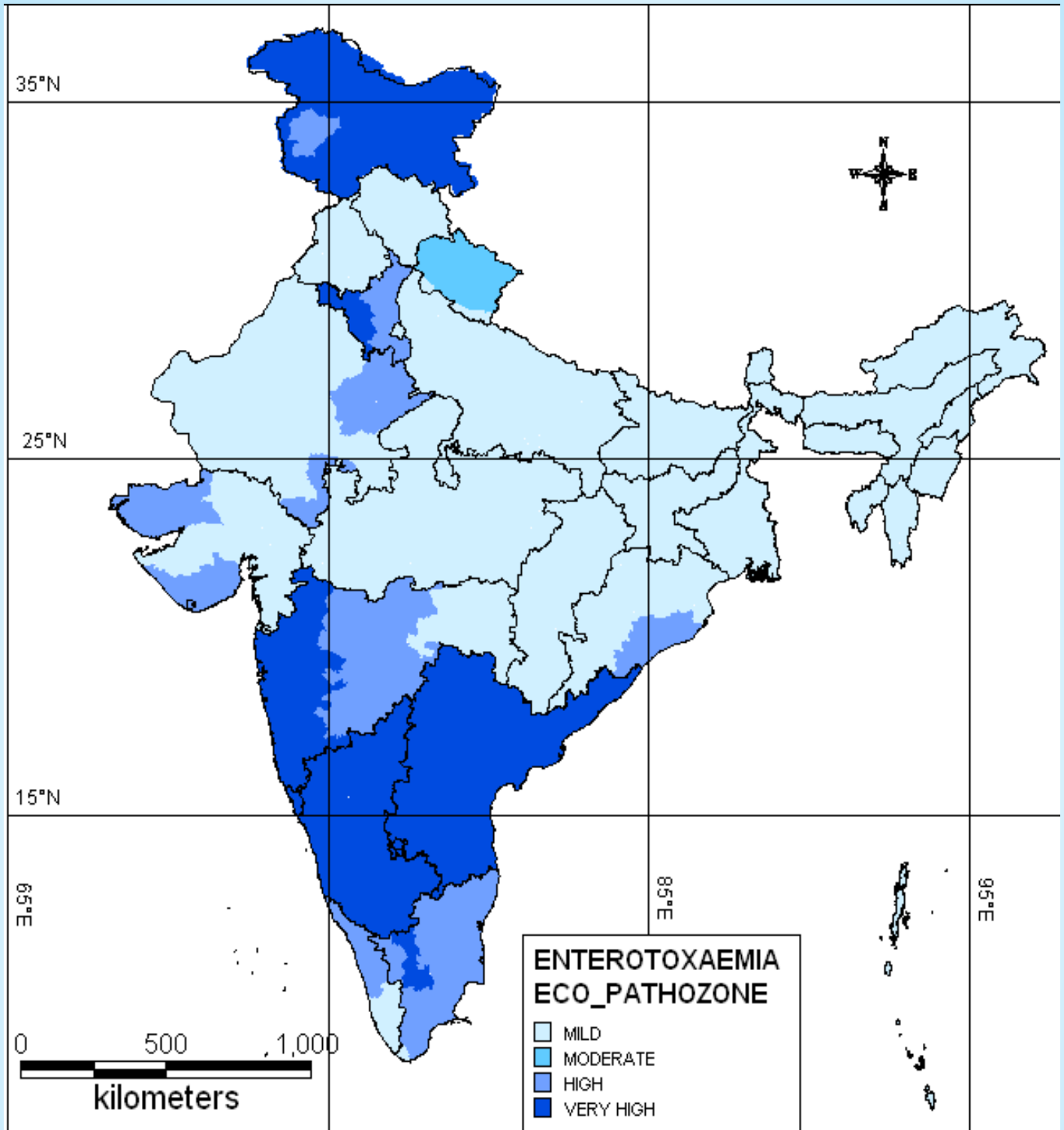
PD_ADMAS bagged five awards in International Seminar on Future of Livestock Health held at TANUVAS, Chennai during 6-8th September, 2012

1. Dr. B.R.Shome and team bagged "Late Dr M. N. Kulkarni Memorial Award" for best research paper presentation on *Host response patterns induced by Staphylococcus aureus in mastitis mice model-unravells a clue for therapeutic intervention.*
2. Dr. S.S.Patil and team bagged "Best Poster Presentation Award" on *Expression pattern of TLR-7 in pig tissues.*
3. Dr. S.S.Patil and team bagged "Best Poster Presentation Award" on *Biofilms of Streptococcus agalactiae isolated from Bovine mastitis.*
4. Dr. V. Balamurugan and team bagged "Best Poster presentation award" on LAMP assay for ORF diagnosis.
5. Dr. B.R.Shome and team bagged "Best Poster Presentation Award" on *E. coli and S. aureus: Pathogen dependant induction of immune response in mastitis mice model.*

Other awards bagged by Scientists of the institute

1. Dr. P. Krishnamoorthy and team bagged "Best Poster Presentation Award" on *Mouse mastitis model – A boon to study bovine mastitis* in 29th Annual convention of IAVP held at College of Veterinary Sciences, Hissar during 5-7th November, 2012.
2. Dr. V. Balamurugan and team bagged "Best Poster presentation award" National virology conference VIROCON-2012 at IVRI, Mukteswar, Uttarakhand during 8 -10th November 2012.
3. Dr. P. Krishnamoorthy and team bagged "Best Poster Presentation Award on *Non target of chitosan-alginate nanoparticles on the biology of aphid lion*" in 5th Bangalore Nano 2012 Conference held at Bangalore during 5-7th December 2012
4. Dr. V. Balamurugan and team "Best Poster presentation Award in International symposium held at GADVASU, Ludhiana during 13- 14th December, 2012.
5. Dr. B.R.Shome and team bagged "Best Poster Presentation Award" on *Methicillin resistant Staphylococci among cows and animal handlers – A major public health threat* in International symposium held at GADVASU, Ludhiana during 13- 14th December, 2012.





Concept and Guidance : Dr. H. Rahman, Project Director

Editor : Dr. S. S. Patil

Editorial Members : Dr. M. R. Gajendragad, Dr. B. R. Shome, Dr. Rajeswari Shome, Dr. Divakar Hemadri, Dr. P.P. Sengupta, Dr. G. B. Manjunatha Reddy, Dr. K. P. Suresh, Dr. P. Krishnamoorthy, Dr. B. Ganesh Kumar, Dr. V. Balamurugan, Dr. G. Govindaraj and Dr. Nagalingam

Published by : Project Director, Project Directorate on Animal Disease Monitoring and Surveillance (PD_ADMAS), ICAR, Hebbal, Bangalore - 560 024, Karnataka
 Phone : 080-23419576, 23412531 Fax : 080-23415329
 email : director@pdadmas.ernet.in web : www.pdadmas.ernet.in
 NADRES site : www.nadres.res.in

Printed by : CNU Graphic Printers, Malleswaram, Bangalore - 560 003 Mob. : 9880 888 399