



Proposed design of new building of PD_ADMAS at Yelahanka, Bengaluru



PD_ADMAS

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From the Director's Desk....

PD_ADMAS, the epidemiological time keeper of India started as a Central Unit of AICRP_ADMAS in 1987. It is a pleasure to inform that the AICRP_ADMAS of the Directorate is completing 26 years of its establishment serving the livestock health care sector. It started as a small unit struggling to cater the needs of diagnostics and guidance in the field of surveillance of animal diseases neglected but causing huge economic losses. Since then it has never turned back and is grown into a Project Directorate which will be renamed as National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) in this plan. We are highly indebted to the AICRP centers located in different parts of the country for their constant support in disease surveillance and monitoring. Risk based disease surveillance in livestock value chains is the newer concept that is taking momentum in the field of epidemiology. Such concepts are highly useful in export and import of livestock, poultry and their products. In this direction, we have initiated work on risk assessment of notifiable Avian Influenza in the country through import of poultry and their products. The Directorate is one of its kinds in the field of veterinary epidemiology and the responsibilities of shouldering the surveillance of more number of livestock diseases including those that are not yet established in the country. The Surveillance of exotic and emerging livestock diseases in the country needs to be strengthened. The threat of introduction of diseases to the country through the porous international borders of north eastern states from adjoining neighboring countries should be viewed seriously. With respect to this,

the Directorate has already initiated the surveillance on the determinants of Malignant catarrhal fever, Porcine reproductive and respiratory syndrome and bovine viral diarrhea in association with other organization in the country.

Construction of Laboratory and Administrative Building at Yelahanka, Bengaluru



Bhoomi Pooja for construction of PD_ADMAS Laboratory and Administrative building was performed on 23rd January, 2013 in the presence all staff of the Directorate, NDDB personnel and contractors.



Dr. S. Ayyappan, Secretary, DARE and DG, ICAR reviewed the progress of the construction of PD_ADMAS laboratory and administrative building on 24th January 2013. Dr. K.M.L. Pathak, DDG(AS), ICAR, Shri. Kotyal, Director (Works), ICAR, Dr. G.K. Sharma, GM, NDDB were also present on the occasion.



NDDB officials explaining the construction work plan to Hon'ble Dr. S. Ayyappan, Secretary, DARE and DG, ICAR during his visit to construction site of PD_ADMAS at Yelahanka on 25th January, 2013.

Model Training Course (MTC) on Brucellosis



The Directorate of Extension, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India sponsored an eight day model training on “Comprehensive approaches for the diagnosis and control of brucellosis” was organized during 4th-11th January, 2013 at this Directorate. The training generated awareness and capacity building on Brucellosis surveillance, diagnosis, vaccination and bio-safety issues. A total of 23 Veterinary officers from 12 states participated and expressed their satisfaction with the program. Dr. (Mrs) Rajeswari Shome, Principal Scientist was the Course Director for the training course.

Training Programme on Research Methodology, Epidemiology and Biostatistics

A two day training programme on Research Methodology, Epidemiology and Biostatistics was organized on 18th-19th, January, 2013. The programme was inaugurated by the Dr. R. Venkataramanan, Joint Director, IVRI, Bengaluru and he expressed research methodology is one of the important component of any research to begin.

Dr. M.R. Gajendragad, Principal Scientist and Course-Director delivered a lecture on epidemiology of livestock



diseases. Dr. K.P. Suresh, Scientist and the resource person delivered lectures on various aspects of research methodologies including online demonstrations of free softwares to estimate the sample size. Dr. D. Hemadri, Principal Scientist apprised the participants on the skills of successful technical writings. Lectures on Good Laboratory Practices, Biosafety and Biosecurity were delivered by Dr.S.S. Patil, Senior Scientist. Dr. H. Rahman, Project Director gave a valedictory address and distributed the participation certificates.

Research Advisory Council (RAC) Meeting



RAC meeting of the Directorate was held on 30th January, 2013 under the Chairmanship of Dr. M.P. Yadav, Ex-Director, IVRI. Other members of the RAC viz., Dr. Mrutyunjaya, Ex-Director, NAIP, Ex-JDs of HSADL: Dr. H.K. Pradhan and Dr. S.C. Dubey, Dr. D. Swaroop, Ex-Director of CIRG were present as an expert in the meeting.



The Technical bulletin on “Glossary in Epidemiology” prepared by Dr. P. Krishnamoorthy, Scientist was released by Dr. M. P. Yadav, Ex-Director, IVRI and Chairman, RAC during the RAC meeting on 30th January, 2013.



Release of Desk Top calendar by Dr. Mruthyunjaya, Ex-Director, NAIP and Member, RAC on 30th January, 2013. The calendar was compiled and edited by Dr. G.B. Manjunatha Reddy, Scientist.

ICAR Short Course on Surveillance of Brucellosis



A ten day ICAR short course on “Multipronged approaches for Surveillance and Diagnosis of Brucellosis” was organized during 19th-28th February, 2013 at this Directorate. The training was attended by 19 Researchers / Teachers / Subject matter specialists from 9 states. The training provided indepth knowledge on surveillance, diagnosis, vaccination and bio-safety issues of Brucellosis. Dr. H. Rahman, Project Director was the Course Director for this short course.

Model Training Course on Bovine Mastitis



A model training course on “Bovine Mastitis-theoretical and

practical considerations in management” sponsored by Directorate of Extension, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India was organized at the Directorate from 1st-8th March, 2013. The aim of the training programme was to disseminate knowledge and understanding on the complexity of the bovine mastitis including different managerial aspects of controlling mastitis and recent advances in the therapeutic interventions. Dr. B.R. Shome, Principal Scientist and Course Director, Dr. P. Krishnamoorthy, Scientist and Dr. D.N. Das, Principal Scientist (NDRI), Course coordinators along with a host of guest speakers imparted the training to the 19 participants from nine state animal husbandry departments.

Celebration of World Veterinary Day



World Veterinary Day was celebrated on 27th April, 2013 at the Directorate. Dr. T. Gopal, Ex-Director, IAH&VB, Bengaluru inaugurated the programme. Dr. H. Rahman, Project Director presented an elaborative talk on the theme “Vaccination to prevent and protect”. Dr. T. Gopal, stressed the need for development of new generation vaccines against livestock diseases since exotic and emerging diseases of both domestic and wild animals are knocking our door. Dr. G.B. Manjunatha Reddy, Scientist coordinated the programme.

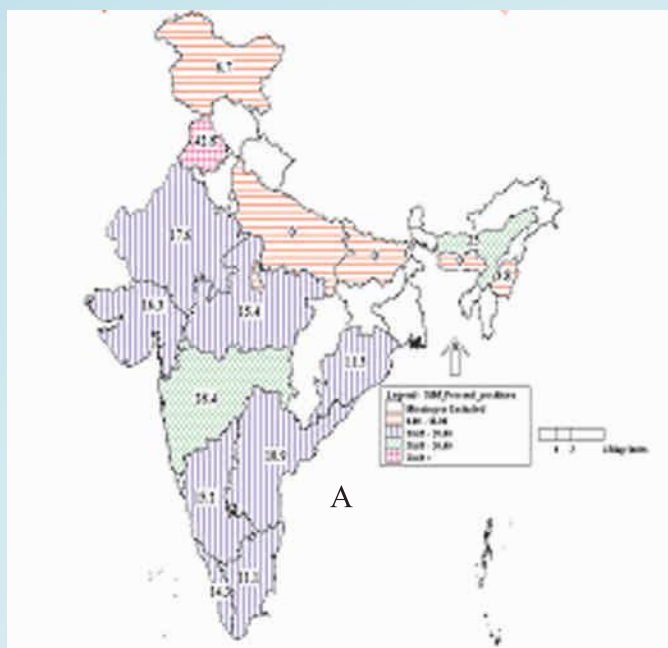
BVSc Students visited PD_ADMAS



Visit of BVSc students, Veterinary College, Shimoga to the Directorate as part their curriculum to study India.admasÉpitrak

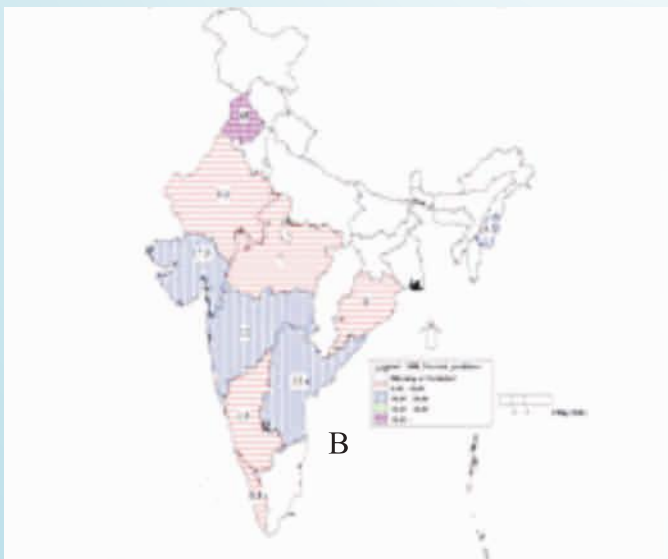
Prevalence Trend of Brucellosis in Cattle and Buffaloes

A) Seroprevalence trend of Brucellosis in random serum samples of cattle during 2011-2013.



Prevalence of Brucellosis in random serum samples of cattle were analyzed for two years and the overall seroprevalence trend remained same in these two years (12%). The highest prevalence of Brucellosis in cattle was recorded in Punjab (43%) followed by Maharashtra (28.4%) and lowest in Uttarakhand and Jammu and Kashmir (6%). Highest seroprevalence upto 40-50% has been recorded in the organized dairy farms of Punjab and this data is suggestive for implementation of vaccination in the state on priority.

B) Seroprevalence trend of Brucellosis in random serum samples of buffaloes during 2011-2013.



Seroprevalence trend of Brucellosis in buffaloes remains same as in case of cattle with overall prevalence of 12%. The highest prevalence was recorded in buffalo population of Punjab and lowest in Karnataka (2%). It was interesting to note that in Manipur, Brucellosis prevalence was lowest in cattle (3.8%) and highest prevalence in buffalo population (19.5%).

National Control Programme on Brucellosis (NCPB)

PD_ADMAS is entrusted by DADF, New Delhi to provide training to the Veterinary Officers of different states under NCPB. Two trainings were conducted, one each at New Delhi on 5th March, 2013 which was inaugurated by the Dr. H. Rahman, Project Director, PD_ADMAS and another at Lucknow on 6th March, 2013 which was inaugurated by Dr. Rudra Pratap, Director, Dept of Animal Husbandry, Govt. of U.P. The training covered the importance of National Control Program and the impact of Brucellosis on man and animals. All the officers were advised on biannual screening of milk samples for Brucellosis and Calf hood vaccination.



NCPB training at Delhi



NCPB training at Lucknow

Interactive Meeting on FMD Economics



A joint institute meeting between PD_ADMAS and PD_FMD scientists who are part of the ICAR sanctioned project on “Assessment of the socio-economic impact of FMD and its control in India” was held on 8th April, 2013 at this Directorate. Veterinary officers of AICRP on FMD also participated in the meeting. Dr. R.N. Sreenivas Gowda chaired the meeting. At the outset, Dr. H. Rahman, Project Director, welcomed all participants. Dr. C.S. Prasad, Director, NIANP appreciated the joint efforts on the subject which is the need of the day, since policy makers keep asking clarifications on such issues. Dr. B. Ganesh Kumar, Senior Scientist made the presentation on Collaborative network project. Dr. B. Pattnaik, Project Director, PD_FMD hoped that the project would deliver the intended outputs timely as outlined. Dr. R. Venkataramanan, Joint Director, IVRI, Bengaluru was present as an expert member. Dr. S.S Patil, Senior Scientist and Dr. G. Govindaraj, Scientist extended the vote of thanks.

Seroprevalence of Leptospirosis in Livestock in Endemic States of India

In any particular geographical region, various Leptospiral serovars are prevalent and are associated with one or more maintenance host(s) that serves as reservoir of infection.

The Random serum samples of cows, buffaloes, sheep and goats originating from coastal districts of endemic states viz., Kerala, Gujarat, Maharashtra, Andhra Pradesh and Tamil Nadu were subjected for seroprevalence study using microscopic agglutination test (MAT). The following serovars were employed as antigens: australis, bankiang, canicola, hardjo, hebdomadis, icterohaemorrhagiae, pyrogens, tarassovi, representing the serogroups Australis, Autumnalis, Canicola, Sejroe, Hebdomadis, Icterohaemorrhagiae, Pyrogens, and Tarassovi (*L.brogpetersenii* sp.), respectively.

The Seroprevalence of Leptospirosis was 11.11% in buffaloes, 9.2% in cattle, 27.1% in goats and 20.69% in

sheep with overall reactive positive percentage of 53.95 % and 59.21% in bovine and small ruminants, respectively. The survey showed predominance of *Leptospira* serogroup antibodies against Sejroe (53.95%) followed by Autumnalis (26.31%), Tarassovi (23.68%), Hebdomadis and Australis (6.59% each), Pyrogens (3.95%), Icterohaemorrhagiae (2.63%), and Canicola (1.31%). Eleven samples showed reaction with more than one serovars representing 14.5% highly reactive serogroups. The top three major reactive serovars were hardjo (29%), bankiang, (11.82%), hebdomadis / tarassovi / pyrogens (4%) in small ruminants, while hardjo (25%), tarassovi (20%), and bankiang (14.47%) in bovines. Among these states, high seroprevalence was observed in Kerala (55.26%), followed by Gujarat (30%), Maharashtra (7.89%), Andhra Pradesh (2.63%) and Tamil Nadu (2.63%).

In conclusion, hardjo serovar representing Sejroe serogroup is more prevalent in livestock in coastal region, which are endemic as indicated by the high seroprevalence. This prevalence in apparently healthy livestock species indicates the presence of this agent in the environment, which may serve as potential source of infection to human.

Dr. H. Morgan Scott Praises the NADRES Model of the Directorate



Dr. H. Morgan Scott, Professor of Epidemiology, Kansas state University, USA visited the Directorate on 15th April, 2013 and lauded the ongoing activities of livestock disease surveillance and monitoring and showed positive inclination to have collaborative mode of research works. Dr. H. Rahman, Project Director appraised activities of the Directorate. Dr. M.R. Gajendragad, Principal Scientist explained in detail about NADRES and its scope. Dr. K. Prabhudas, Former Project Director also participated in the discussion.

Institute Research Council (IRC) Meeting



IRC meeting of the Directorate was held on 20th April, 2013 under the Chairmanship of Dr. H. Rahman, Project Director. Dr. M. Rajasekhar, Former Project Director appreciated the sustained outstanding research contribution made by the scientist of the Directorate and expressed the work of the scientists are in line with the International standards of veterinary epidemiology. Dr. T. Gopal, Former Director, IAH&VB, Bengaluru, Dr. Gopinath Rao, Prof & Head, Dept of Statistics, UAS, Bengaluru, Dr. Lalith Achoth, Prof & Head, Dairy Economics, KVAFSU, Bengaluru were also participated in the discussion.

Field Epidemiology Training Programme



The Directorate conducted 3 day “Field Epidemiology Training Programme” for field Veterinarians during 4th-6th June, 2013. Dr. H. Rahman, Project Director inaugurated the programme. Dr. M.R. Gajendragad, Principal Scientist and Course Director presented the importance of surveillance of livestock disease and methodology to investigate diseases in field case. Various topics related to surveillance of bacterial,

viral and parasitic diseases were dealt by scientists of the Directorate. Dr. K.P. Suresh, Dr. S.S. Patil and Dr. G.B. Manjunatha Reddy were the conveners of the programme.

Training cum Mid-Term Review on “DBT Network Project on Brucellosis.”



One day training cum mid-term review was undertaken with an objective to review the progress and identifying issues related to the coordination of the sub projects under DBT network project on Brucellosis on 1st June, 2013 at Directorate. Dr. H. Rahman, Project Director, made a brief presentation on the progress made by all the units. Dr. S.R. Rao (Advisor DBT) emphasized on the coordination of the different units of the project and expressed satisfaction on the initial progress of the project. All Principal Investigators of the network project presented their progress report. A handbook on Standard Operating Protocol - DBT Network Project on Brucellosis compiled and edited by: Dr. R. Shome, was released by Dr. S. R. Rao.

Risk Based Disease Surveillance in Livestock Value Chains



Dr. S.S. Patil, Senior Scientist and Dr. G.B. Manjunatha Reddy, Scientist of this Directorate participated in a training workshop on “Practical Application of Designing Risk Based Disease Surveillance in Livestock Value Chains” conducted by FAO, India at Chandigarh from 15th-20th April, 2013.

Conference on “Emerging and Re-emerging Pathogens and Bio-risk Management



Dr. D. Hemadri, Principal Scientist and Dr. B. Ganesh kumar, Senior Scientist of the Directorate participated in two day conference on “Emerging and Re-emerging Pathogens and Bio-risk Management” from 7th-8th May, 2013 jointly organized by National Disaster Management, FICCI at New Delhi.

Consultative Workshop in Animal Biotechnology



Multi-Stakeholders Consultative workshop on Opportunities, Challenges and Strategies in Animal Biotechnology organized by Agri - Biotech Foundation and National Institute of Animal Biotechnology was held at Hyderabad on 18th January, 2013. Dr. K.M.L. Pathak, DDG (AS), ICAR inaugurated the workshop as a Chief Guest. Key note address was presented by Dr. H. Rahman, Project Director on Status on Prevalence of Animal Infectious Diseases in South India and scope for Biotechnological Interventions.

ILRI Second Global PPR Research Alliance (GPRA) Meeting on 29-30th April 2013 at ILRI, Nairobi, Kenya



Dr. V. Balamurugan, Senior Scientist, participated in the second global PPR Research Alliance (GPRA) meeting held on 29-30th April 2013 at International Livestock Research Institute, Nairobi, Kenya



Staff of the Directorate participated in “ICAR Zonal sports meet-2013” (south zone) held on 18th-22nd February, 2013 at SBI, Coimbatore.



Dr. M.R. Gajendragad, Principal Scientist, PD_ADMAS, Bengaluru was nominated as advisor in the scientific core committee constituted for the National Surveillance Programme for Aquatic Animal Diseases. In his capacity as advisor, Dr. Gajendragad attended the launch workshop held at NBFGR, Lucknow on 27th and 28th May, 2013 and presented his views.



Dr. P. Krishnamoorthy, Scientist participated in the SAARC Agriculture Centre sponsored Regional training programme on “Molecular Techniques in diagnosis of disease of farm animals and poultry held at HSADL, Bhopal from 22nd April to 1st May, 2013.

New Project Sanctioned

DST Project on Rabies

Science and Engineering Research Board (SERB), Department of Science and Technology (DST), Ministry of Science and Technology, Government of India sanctioned project under Fast Track Scheme for Young Scientists on “Molecular Diagnosis and Epidemiology of Rabies in Livestock” with objectives to study the prevalence, diagnosis and molecular epidemiology of rabies virus isolates circulating in India (SR/FT/LS-93/2012).

Workshops / Conferences / Trainings attended

1. Dr. P. Krishnamoorthy, Scientist attended the Midterm review meeting of “All India Network Project on Haemorrhagic Septicaemia” held at IVRI, Barielly on 18th January, 2013.
2. Dr. S.S. Patil, Senior Scientist and Dr. G.B. Manjunatha Reddy, Scientist attended 17th Asian regional meeting and conference of commonwealth veterinary association with a theme “Strengthening of rabies diagnosis and dog population control in the Indian sub-continent” held at Veterinary College, Bengaluru on 28th-30th January, 2013.
3. Dr. S.S. Patil, Senior Scientist and Dr. G.B. Manjunatha Reddy, Scientist participated in “One day workshop on DRIT for Rabies diagnosis” held at Veterinary College, Bengaluru on 31st January, 2013.
4. Dr. V. Balamurugan, Senior Scientist participated in the “5th Standing Committee on Zoonosis” held at Directorate General of Health Services (DGHS), New Delhi on 26th February, 2013.
5. Dr. R. Sridevi, Scientist participated in the NAIP sponsored “Management Development Programme on Technology Management for Researchers” at NAARM, Hyderabad from 28th February to 6th March, 2013.
6. Dr. D. Hemadri, Principal Scientist and Dr. V. Balamurugan, Senior Scientist participated in the “International Workshop on Eradication of Peste des Petits Ruminants in India” at NIAB, Hyderabad, on 4th March, 2013.
7. Dr. R. Sridevi, Scientist attended “ZTM-BPD Annual Meeting” on 7th March, 2013 at Hyderabad.
8. Dr. G.B. Manjunatha Reddy, Scientist attended seminar on “Rabies post exposure prophylaxis- Recommendations and Practices” at New Delhi on 17th March, 2013.
9. Dr. V. Balamurugan, Senior Scientist, Dr. P. Krishnamoorthy, Scientist and Dr. M. Nagalingam, Scientist participated in the “XXIII Indian Veterinary Congress and XX Annual Convention of Indian Association for the Advancement of Veterinary Research and International Conference on Thrust area in Veterinary Research, Education, Regularly reforms and Governance for quality Services to Farmers” organized by IAH&VB and Veterinary college, Bengaluru, KVAFSU, held at Bengaluru from 16th-17th April, 2013.
10. Dr. R. Shome, Principal Scientist attended “Two days joint ICMR-one health brucellosis protocol development workshop” at New Delhi from 3rd-5th, June, 2013.
11. Dr. R. Shome, Principal Scientist attended “NDDDB-ICAR joint working group on evaluation of Brucellosis diagnostics protocol meeting” held at, ICAR, New Delhi on 5th June, 2013.

Promotions / Superannuation

- Dr. S.S. Patil, Senior Scientist and Dr. G. Govindaraj, Scientist promoted to the next RGP on 30th April, 2013.
- Shri. P. Narender, Administrative Officer of the Directorate was superannuated on 30th June, 2013.

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