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Director's Desk

Greetings to all!

It is my privilege that Hon'ble Shri Radha Mohan Singh, Union Minister of Agriculture and Farmers' Welfare released the Livestock Disease Forewarning (LDF) Mobile App developed by scientists of ICAR-NIVEDI for forewarning of 13 prioritized livestock diseases at district level on 27th December 2017. This mobile App will be useful to various stakeholders in devising strategies for prevention of livestock disease outbreaks in the country, there by farmers will be economically benefitted. On the occasion of Institute Foundation Day on 1st July, 2017, an eye camp was organized for all the NIVEDI staff and various activities were conducted. In order to spread awareness about the emerging challenge of antimicrobial resistance, ICAR-NIVEDI celebrated World Antibiotics Awareness week during 13-19th November, 2017 by creating awareness among NIVEDI staff and students from four schools in Bengaluru. Institute also observed 'Swachhata Hi Sewa hai' from 15th September to 2nd October, 2017 with various activities and ICAR-NIVEDI staff enthusiastically participated in the cleanliness activities. Agricultural Education Day was observed at ICAR-NIVEDI on 4th December, 2017 by organizing sensitization programme for School children. Also, our scientists participated in extension activities including Mera Gaon Mera Gaurav (MGMG) and created awareness among the livestock farmers and school children. Kannada Rajyotsava and Hindi Saptah were celebrated in the institute and various competitions have been conducted on these occasions.

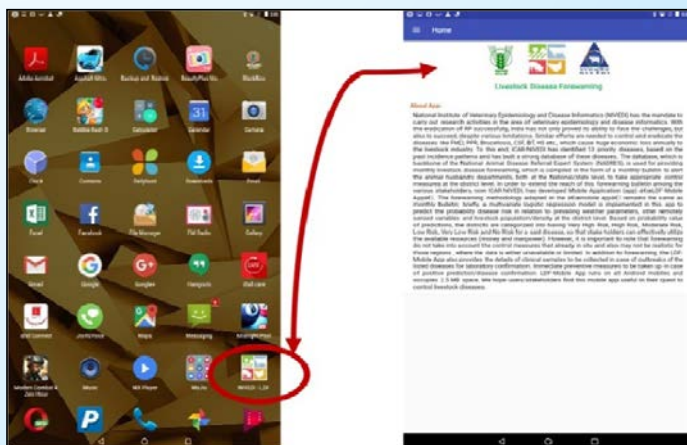
Release of LDF Mobile App



Hon'ble Shri Radha Mohan Singh, Union Minister of Agriculture and Farmers' Welfare released the Livestock Disease Forewarning (LDF) Mobile Application in the presence of Hon'ble Shri Gajendra Singh Shekhawat, Union Minister of State for Agriculture and Farmers' Welfare, Dr. Trilochan Mohapatra, Secretary, DARE & Director General, ICAR, Dr. J. Jena, DDG (Animal Science), ICAR, Dr. Parimal Roy, Director, Dr. D. Hemadri, Principal Scientist and Dr. K.P. Suresh, Principal Scientist, ICAR-NIVEDI on 27th December, 2017 at Krishi Bhawan, New Delhi.

Research Achievements

Livestock Disease Forewarning – Mobile Application (LDF-Mobile App)



ICAR-NIVEDI has the mandate to carry out research activities in the area of veterinary epidemiology and disease informatics. With the eradication of Rinderpest successfully, India has not only proved its ability to face the challenges, and similar efforts are needed to control and eradicate the diseases like Foot and Mouth disease, Pesti des Petits Ruminants, Brucellosis, Classical Swine Fever, Bluetongue, Haemorrhagic septicemia, etc., which cause huge economic loss annually to the livestock industry. To this end, ICAR-NIVEDI has prioritized 13 livestock diseases (Anthrax, Babesiosis, Black quarter, Bluetongue, Enterotoxaemia, Fascioliasis, FMD, HS, PPR, Sheep and Goat Pox, Classical swine fever, Theileriosis and Trypanosomiasis) based on the past outbreak patterns and has database for these diseases. The database, which is backbone of the National Animal Disease Referral Expert System (NADRES), is used for providing monthly livestock disease forewarning, which is compiled in the form of a monthly bulletin to alert the animal husbandry departments, both at the National/State level, to take appropriate control measures at the district level. In order to extend the reach of this forewarning bulletin among the various stakeholders, ICAR-NIVEDI, has developed Mobile Application(app) "LDF-Mobile App". The forewarning methodology adopted in the "mobile App" remains the same as monthly bulletin; briefly, a multivariate logistic regression model is implemented in this App to predict the probability of disease risk in relation to prevailing weather parameters, other remotely sensed variables and livestock population/density at the district level. The logistic regression first determines the best fitting (yet biologically reasonable) model to describe the relationship between dichotomous characteristic of interest (disease outbreak) and a set of predictors (weather parameters, remote sensing variables and demographics) and later generates the co-efficient (and its standard error and significance level) of a formula to predict a logit transformation of the probability of presence of the characteristics of interest. Thus, based on probability value, the districts are categorized into having Very High Risk, High Risk, Moderate Risk, Low Risk, Very Low Risk and No Risk for a disease, so that stake holders can effectively utilize the available resources (money and manpower). However, it is important to note that forewarning do not take into account the control measures that are already *in situ* and also may not be realistic for those regions, where the data is either unavailable or limited. In addition to forewarning, the LDF-Mobile App also provides the details of clinical samples to be collected in case of outbreaks of the listed diseases for laboratory confirmation. Immediate preventive measures to be taken up in case of positive prediction/disease confirmation. LDF-Mobile App runs on all Android mobiles and occupies 2.5 MB space. We hope users/stakeholders find this mobile app useful in their quest to control livestock diseases.

Scientific Activities



Shri Chabbilendra Roul, Additional Secretary, DARE & Secretary, ICAR visited ICAR-NIVEDI and reviewed the progress of the Institute by interacting with scientists on 25th August, 2017.



Dr. H. Rahman, Former DDG (Animal Science) and Regional Representative for South Asia, International Livestock Research Institute, New Delhi visited ICAR-NIVEDI on 25th November, 2017 and interacted with all the staff of ICAR-NIVEDI and reviewed the progress of ILRI project.



25th Annual Review meeting of AICRP on ADMAS of ICAR-NIVEDI held during 26-27th October, 2017 at Disease Investigation Section, Aundh, Pune and reviewed the progress of the work done for the year 2016-17.



International trainees from Central Poultry Development Organization, Hessarghatta visited ICAR-NIVEDI facility and interacted with scientists on 5th December, 2017.



Institute Technology Management Committee (ITMC) meeting was held on 3rd August, 2017 under the Chairmanship of Dr. Parimal Roy and other members were Dr. B.P. Srinivasa, ICAR-IVRI & IPR expert member, Dr. D. Hemadri and Dr. S.B. Shivachandra.



ICAR-NIVEDI conducted 11th Institutional Animal Ethics Committee (IAEC) meeting on 8th December, 2017 under the Chairmanship of Dr. Parimal Roy, Director. Dr. R.K. Shakthi Devan, CPCSEA Main Nominee and Dr. R.G. Prakash, Socially aware Nominee and other members from ICAR-NIVEDI attended the meeting. The CPCSEA main nominee conducted the Laboratory animal house inspection and submitted the report to CPCSEA, New Delhi.



XVI Institute Management Committee (IMC) meeting of ICAR-NIVEDI was conducted under the Chairmanship of Dr. Parimal Roy, Director, ICAR-NIVEDI on 17th October, 2017. The other members were Dr. R.V. Prasad, Vice Chancellor, KVAFSU, Dr. B.C. Ghosh, Principal Scientist, ICAR-NDRI, Dr.B.P. Srinivasa, Principal Scientist, ICAR-IVRI, Dr. A.K. Samanta, Principal Scientist, ICAR-NIANP, Shri Mallappa Gowda, Mysuru, Shri Ashok Allapur, Vijayapura, Shri V. Raghuraman, AO, Shri Rajeevalochana, AAO, and Shri R.K. Babu, AF&AO, ICAR-NIVEDI.



World Antibiotics Awareness week was celebrated at ICAR-NIVEDI during 13-19th November, 2017 and imparted awareness on use of antibiotics and antimicrobial resistance to ICAR-NIVEDI staff members and school children of Kendriya Vidyalaya, CRPF, Yelahanka, Kendriya Vidyalaya, RWF, Yelahanka, Nagarjuna Vidyaniketan School, Ramagondanahalli and KBM Blossom Public School, Marasandra on this occasion.

Important Events



Organized Eye Camp in association with Dr. Agarwal's Eye Hospital, Yelahanka, Bengaluru for all the staff of ICAR-NIVEDI on the eve of Institute Foundation day on 1st July, 2017. Dr.M. Shivamurthy, Professor and Head, Department of Extension, UAS, Bengaluru delivered a guest lecture on 'Doubling of farmers' income' on this occasion.



ICAR-NIVEDI staff took pledge for New India on the occasion of 75 years of Quit India Movement on 9th August, 2017.



71st Independence day was celebrated at ICAR-NIVEDI on 15th August, 2017 and Dr. Parimal Roy, Director addressed the staff members on this occasion.



Kannada Rajyotsava was celebrated at ICAR-NIVEDI on 8th November, 2017 and Dr. Basvaraj Benni, Assistant Director, Dept. of AH & VS, Bellary delivered a guest lecture and various competitions were organized on this occasion.



Hindi Saptah was celebrated during 14-20th September, 2017 at ICAR-NIVEDI and various competitions like extempore speech, essay writing, letter writing and debate were organized and distributed certificate and prizes to winners on the occasion.



On the occasion of Constitution day, Preamble of the Indian Constitution was read by staff members of ICAR-NIVEDI on 27th November, 2017.



ICAR-NIVEDI participated in the ICAR-South Zone sports meet held at ICAR-Sugarcane Breeding Institute, Coimbatore during 9-13th October, 2017.



Agricultural Education day was celebrated at ICAR-NIVEDI by organizing sensitization programme for School students from Nagarjuna Vidyaniketan School, Yelahanka on 4th December, 2017.



Vigilance awareness week was celebrated during 30th October-5th November, 2017 at ICAR-NIVEDI and Dr. Parimal Roy, Director administered the vigilance and integrity oath to staff members and various competitions were organized on this occasion.

Swacchh Bharat Abhiyan





As part of “Swachhta Hi Seva Hai” programme from 15th September-2nd October 2017, ICAR-NIVEDI observed ‘Sewa Diwas’ on 17th September, 2017 by cleaning the entire campus and stores. Also observed ‘Sarwatra Swachhta’ on 25th September, 2017 by visiting Veerasagara village and Bannerghatta Zoological park on 1st October, 2017 and created awareness on Swacchh Bharat Abhiyan programme.

Mera Gaon, Mera Gaurav Programme



Dr. P.P. Sengupta, Dr. S.S. Patil and Dr J. Hiremath, Scientists, ICAR-NIVEDI held discussions with the Head Master of a School along with the secretary of Milk Producer’s Co-operative Society at Kodihalli, Doddaballapur, Bengaluru Rural district and created awareness on zoonotic diseases among the farmers on 24th July, 2017.



Dr. G. Govindaraj, Senior Scientist, Dr. P. Krishnamoorthy, Scientist and Dr. Yogishardhaya, STO, ICAR-NIVEDI organized Hygiene and cleanliness awareness programme by showing videos and explaining the importance of hygiene to School children at Kodipalya, Bengaluru Rural district on 8th August, 2017 .

Livestock Disease Investigations/Field visits



Dr. P. Krishnamoorthy, Scientist collected data by using questionnaire for Institute research project work from Field Veterinarians in Puducherry on 26th July, 2017.



Dr. S.S. Patil and Dr. J. Hiremath, Scientists investigated the cause of Piglet diarrhoea in a pig farm, Halebudanur, Mandya district on 27th July, 2017.



Dr. M.M. Chanda, Scientist investigated a suspected Anthrax outbreak in a Sheep and Goat farm, Harihara, Davanagere, Karnataka and collected clinical samples on 23rd August, 2017.



Dr. B.R. Shome, Principal Scientist, Dr. Rajeswari Shome, Principal Scientist and Dr. P. Krishnamoorthy, Scientist had discussion with Officials from Kolar and Chikkaballapur Milk Union Limited, Chinthamani for implementation of CDC mastitis project at Chinthamani on 9th September, 2017.



Dr. J. Hiremath, Scientist conducted outbreak investigation and collected clinical samples from Pigs in Mudhole, Bagalkot, Karnataka on 25th November, 2017.



ICAR-NIVEDI organized DBT-PMU sponsored training cum workshop on 'Sampling plan and data analysis using online software' to the Network project staff members during 20-21st September, 2017.



Dr. P.P. Sengupta, Principal Scientist, Dr. Siju, S.J., Scientist and Dr. R. Yogisharadhya, STO collected snails from Ramagondanahalli, Jakkur, Hessarghatta, Palanahalli and Yelahanka lakes in Bengaluru for the research project work during 11-12th December, 2017.



Dr. Rajeswari Shome, Principal Scientist and Dr. M. Nagalingam, Scientist conducted DADF sponsored one day training program to field Veterinarians under Brucellosis Control Program at Directorate of AH & VS, Kohima, Nagaland on 26th September, 2017.

Human Resource Development



ICAR-NIVEDI organized Orientation cum Technical seminar on 'Anthrax surveillance' for Veterinary and Medical professionals from Chikkaballapur and Kolar districts on 11th August, 2017.



ICAR-NIVEDI organized ICAR short course on 'Advances in Risk Analysis and GIS based prediction modeling of livestock parasitic diseases' held during 23rd October-1st November, 2017.



CDC and American Society for Microbiology sponsored workshop on 'Laboratory Capacity Building for Leptospirosis' organized jointly by ICAR -NIVEDI and CDC, Atlanta, USA at ICAR-NIVEDI during 11-15th September, 2017.

Awards and Recognition

1. Dr. Rajeswari Shome, Dr. V. Balamurugan and Dr. P. Krishnamoorthy, Scientists received best oral presentation award and Dr. Rajeswari Shome, Principal Scientist received best poster presentation award in the XV Annual Conference of Indian Association of Veterinary Public Health Specialists held at Tirupati during 11-13th October, 2017.

Patent filed

1. Recombinant non-structural proteins NS1 and NS3 as fusion protein (rNS1-NS3) based immuno-diagnostic assay for bluetongue, Application Number: 201741040913 was filed on 16th November, 2017 by Dr. D. Hemadri, Dr. N. N. Mohanty and Dr. S. B. Shivachandra.

New Projects Sanctioned

1. CRP on Precision diagnostic approach for fasciolosis in cattle and buffaloes-PI: Dr. P. P. Sengupta, Principal Scientist
2. CRP on Development of Diagnostic Test for detection of classical swine fever -PI: Dr. S. S. Patil, Principal Scientist.
3. CRP on Development and validation of novel multiplex sero-diagnostic for diagnosis of porcine respiratory disease complex-PI: Dr. Jagadish Hiremath, Scientist
4. DST Project on Understanding the genetic diversity of *Taenia solium* cysticercosis and development of recombinant antigen based diagnostic assays for serosurveillance-PI: Dr. Siju, S.J., Scientist.

Participation in Meetings/Seminars/Symposia/Training

1. Dr. S.B. Shivachandra, Dr. P. Krishnamoorthy, Dr. M. Nagalingam and Dr. R. Sridevi, Scientists attended the meeting on 'Finalization of Research Proposals on Antimicrobials Resistance' organized by FAO-USAID during 5-6th July, 2017 held at Bengaluru.
2. Dr. J. Hiremath, Scientist, attended 5th South Asia Biosafety Meeting held at Taj West End, Bengaluru during 11-13th September, 2017.
3. Dr. J. Hiremath, Scientist, attended ICAR Short course on 'Application of Bioinformatics in Agricultural Research and Education' held at ICAR-NAARM Hyderabad during 14-23rd September, 2017.
4. Dr. Rajeswari Shome, Dr. V. Balamurugan, Principal Scientists and Dr. M. Nagalingam, Scientist attended training cum workshop on 'Sampling plan and data analysis using online software' held at ICAR-NIVEDI during 20-21st September, 2017.
5. Dr. S.S. Patil, Dr. P. Krishnamoorthy, Dr. J. Hiremath, Dr. M.M. Chanda, Scientists, attended FAO online training course on 'FMD Post Vaccination Monitoring' during 20th September to 8th November, 2017.
6. Dr. J. Hiremath, Scientist, attended CDC-IQTL training on 'Biosafety and Biorisk management' held at Royal Star Hotel, New Delhi during 9-13th October, 2017.
7. Dr. V. Balamurugan, Dr. P. Krishnamoorthy and Dr. M.M. Chanda, Scientists participated in XV Annual Conference of Indian Association of Veterinary Public Health Specialists held at College of Veterinary Sciences, SVVU, Tirupati during 11-13th October, 2017.
8. Dr. Rajeswari Shome, Principal Scientist, attended 'One-health approach for Brucellosis control in India' held at NASC complex, New Delhi on 26th October, 2017.

9. Dr. P. Krishnamoorthy and Dr. G.B. Manjunatha Reddy, Scientists participated in Asian Veterinary Pathology Congress 2017 held at Veterinary College, Bengaluru during 9-11th November, 2017.
10. Dr. Rajeswari Shome, Principal Scientist participated in XV Biennial Conference of Indian Association of Women Veterinarians held at Hyderabad during 21-22nd November, 2017.
11. Dr. V. Balamurugan, Principal Scientist, participated in 26th Annual Conference of Indian Virological Society VIROCON-2017 held at NITTE University, Mangaluru during 7-9th December, 2017.
12. Dr. S.B. Shivachandra, Principal Scientist attended MDP on 'Leadership Development' held at ICAR-NAARM, Hyderabad during 12-23rd December, 2017.
13. Dr. P. Krishnamoorthy, Scientist participated in Training cum Awareness workshop on Journal discovery through J-GATE@CeRA held at CMFRI, Cochin on 15th December, 2017.
14. Dr. V. Balamurugan, Principal Scientist attended DBT sponsored workshop on 'Brucella Bioinformatics' held at MKU-Madurai during 18-22nd December, 2017.
15. Sh. Gangadhareshwara L, LDC attended workshop on 'Pay fixation' held at ISTM, New Delhi during 12-14th July, 2017.
16. Sh. V. Raghuraman, Administrative Officer attended training on 'Establishment and Financial matters' held at ICAR-NAARM, Hyderabad during 17-23rd August, 2017.
17. Sh. Babu R.K, AF&AO attended training programme on 'General Financial Rules' held at ISTM, New Delhi during 21-23rd August, 2017.
18. Sh. Vijayaraj K, Stenographer Gr. III attended training on 'Enhancing efficiency and behavioural skills' held at ICAR-NAARM, Hyderabad during 25-31st October, 2017.
19. Sh. Rajeevalochana, AAO attended workshop on 'Goods and Services Tax' held at ISTM, New Delhi during 6-7th November, 2017.
20. Sh. Gangadhareshwara L, LDC, attended training on ERP held at ICAR-IASRI, New Delhi during 22-27th December, 2017.

Trainings/Workshops organized

1. Training program on Diagnosis of brucellosis was organized as part of DBT- ADMaC project at Disease Investigation Laboratory, Department of AH &VS, Govt. of Manipur during 23-24th August, 2017.
2. DADF sponsored one day training program under Brucellosis Control Program (B-CP) was organized at ICAR-K.H. Patil Krishi Vigyan Kendra Hulkoti, Gadag District, Karnataka on 31st August, 2017.
3. Organized Orientation cum Technical seminar on 'Anthrax surveillance' for veterinary and medical professionals from Bellary, Koppal, Davanagere and Raichur districts on 5th September, 2017 at Daroji Nature Park, Hospet, Bellary.

4. CDC & American Society for Microbiology sponsored workshop on 'Laboratory Capacity Building for Leptospirosis' organized jointly by ICAR -NIVEDI and CDC, USA at ICAR-NIVEDI during 11-15th September, 2017.
5. DBT sponsored training cum workshop on 'Sampling plan and data analysis using online software' was organized at ICAR-NIVEDI during 20-21st September, 2017.
6. DADF sponsored one day training program under Brucellosis Control Program (BCP) was organized at Directorate of AH & VS Department, Kohima, Govt. of Nagaland on 26th September, 2017.
7. ICAR sponsored short course on 'Advances in risk analysis and GIS based prediction modeling of livestock parasitic diseases' was organized at ICAR-NIVEDI during 23rd October-1st November, 2017.
8. Training program on diagnosis of brucellosis was organized as part of DBT- ADMaC project at Core Lab -II, ICAR, Barapani during 7-9th November, 2017.
3. Dr. Renee L Galloway, Bacterial Special Pathogens Branch, CDC, Atlanta, USA
4. Dr. Daniel Garcia, Division of Global Health Protection, CDC India, New Delhi
5. Dr. Naveen Gupta, Joint Director, NCDC, New Delhi
6. Dr. Simmi Tiwari, Deputy Director, NCDC, New Delhi
7. Dr. Mohan Papanna, Public Health Specialist, CDC India, New Delhi
8. Dr. Srinivasa Kaveri, Director, CNRS, New Delhi
9. Dr. P. Vijayachari, Director, ICMR-RMRC, Port Blair, A&N Islands
10. Dr. Rajan Gupta, Principal Scientist, Animal Science Division, ICAR, New Delhi
11. Dr. Dinakar Rawal, Deputy Director (Epidemic), Commissionerate of Health, Gujarat
12. Dr. Rekha Jain, Senior Consultant, ASM India, New Delhi

Joining/Promotion/Transfer

1. Dr. G. Govindaraj, Senior Scientist has been promoted from RGP ₹8,000/- to Pay band 4 with RGP ₹9,000/- with effect from 1st January 2017.
2. Dr. Siju, S.J., Scientist cleared probation with effect from 31st December 2016.
3. Sh. Jayarama Naik, K.M, Administrative officer transferred to ICAR-DCR, Putur on 3rd August, 2017.
4. Sh. V. Raghuraman joined in ICAR-NIVEDI as Administrative Officer on 4th August, 2017.
13. Dr. Avijit Roy, Joint Secretary, IDSP, Andaman and Nicobar Islands
14. Dr. Ravi Kumar, Senior Regional Director, Health & Family Welfare, Bengaluru
15. Dr. Sunil Lahane, Western Regional Disease Diagnostic Laboratory, Pune
16. Prof. Neeta Khandelwal, Dept. of Microbiology, Govt. Medical College, Surat
17. Prof. Nagarathna S., Department of Neuromicrobiology, NIMHANS, Bengaluru

Distinguished visitors

1. Shri. Chhabilendra Roul, Additional Secretary, DARE & Secretary, ICAR, New Delhi
2. Dr. H. Rahman, Former DDG(AS) & ILRI Regional Representative for South Asia
18. Dr. Raniprameela, State Disease Investigation Laboratory, SVVU, Tirupati
19. Prof. M. Shivamurthy, Department of Agricultural Extension, UAS, Bengaluru
20. Dr. Basavaraj Benni, Assistant Director, Dept. of AH&VS, Hospet

Concept and Guidance : **Dr. Parimal Roy**, Director, ICAR-NIVEDI

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Dr. M. Nagalingam, Scientist and **Dr. Siju Susan Jacob**, Scientist

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