

Minutes of Review Meeting of the DBT project entitled “Establishment of a Consortium for One Health to address Zoonotic and Transboundary Diseases in India, including the Northeast Region”.

The Project Monitoring Committee meeting was held on 27th June 2022 under the Co Chairmanship of Prof. Y.K.Gupta and Dr. B. Ravindran through video-Conferencing. In addition to co-chairs, Prof. C.G.Joshi, Prof P. Borah, Prof K. Kumanan and Prof Raphael Lingdoh represented PMC. All participant investigators and their coPIs were present along with Consultant, Dr. A.K.Rawat and representatives of DBT- Dr. Nitin Jain and Dr. G. Nagpal.

Dr Nitin Jain, DBT, welcomed Co-Chairs , Members of PMC, Co-ordinator and investigators of the project. Dr Jain briefed about the genesis of One Health project and mentioned that this is one of flagship programme of the department which needs very close monitoring so that objectives may be accomplished.

Prof. Gupta, Co-Chairman, PMC also welcomed participants and briefed about global importance of this programme. While appreciating DBT for initiating first PAN India One Health programme, he mentioned about possible challenges particularly in coordination, collaboration and communication in implementation of this collaborating project having 26 institutions of various agencies. He opined that this type of programme should be dynamic in nature having provisions for mid-course correction, flexibility for inclusion of new institutions, inclusion of new diseases, development /validation of new reagents/ kits/ vaccines etc.

Dr. Ravindran, Co-Chairman, PMC provided general comments about the implementation of project and mentioned that putting together and coordinating 26 investigators is commendable and needs to be appreciated. He interacted during the presentation of progress of project to give specific recommendations. He preferred to have major objective considered as study of prevalence rather than surveillance since the study has not been designed for surveillance.

Prof Joshi, Prof Borah, Prof Kumanan and Prof Raphael interacted during course of presentation and provided their inputs

Dr Subeer Majumdar, Coordinator of Project, welcomed Co-Chairs, members and DBT officers on behalf of consortia and presented background and detailed timelines of project development, deliverables, criteria for selection of diseases including Transboundary Diseases (TADs), prevalence of diseases in animals and human, indicative samples to be collected etc. He also briefed about more than 40 interactive meetings organized with various partners since the initiation of the project to familiarize them with the work needed to be done and its implementation in harmonized manner. Dr Majumdar also presented basis of meta-

analysis for developing sampling plan for surveillance, selection of diagnostic kits and uniform SOPs. Prof. Gupta advised to refer existing data from National tuberculosis program and see that there is no overlap in the working amongst various agencies. It was also emphasized during the discussion that infection with M. bovis should be a major factor to be considered as far as zoonosis is concerned. Prof Joshi enquired on prevalence data of CCHF, which was shown in the tabulated presentation. Prof Kumanan stated that though the DBT Network will be working on 10 diseases, if need be, the choice of the diseases can be dynamic to suit some extraordinary situations that might arise.

Dr Suresh, NIVEDI, presented sampling strategies for animals in this project which is based on meta analysis of the data collected from research reports and publications. The detailed statistics driven structured sampling plan has been prepared up to village level (State/ district/ village) based on the overall prevalence of disease and population of species present in a particular state. He also presented sampling strategies for surveillance, estimation of prevalence by meta-analysis modelling which will help in disease monitoring, modelling and forewarning. Sampling strategies of clinical diseases are being finalized based on hospital data. Dr. Ravindran suggested that detailed Forest plot and meta-analysis of selected diseases should preferably made for all diseases as this is a very important collection of existing data.

Prof. G. Dhanakar Raj, TANUVAS, presented basis of selection of diagnostic tests/ kits identified for surveillance of selected animal diseases. He mentioned that kits for disease surveillance has been selected based on the fitness for purpose having at least 95% sensitivity and 75% specificity. These selected kits/ tests will only be used by all centres for uniformity in results. Prof. Kumanan suggested that test for NIPAH should be validated well if reagents are taken from Pirbright institute.

Prof. Nagamani, GMC, presented surveillance plan for clinical disease for which syndromic approach will be used. At present, only hospital based cases are being taken in the first phase of the project. Prof Gupta advised for more clarity on AFI and asked to have specific criteria for inclusion in the SOP. Prof Raphael suggested that inclusion and exclusion criteria to be made for all the clinical syndromes so that it can be uniformly followed across all the medical centres. Prof. Borah suggested development of local/regional coordination among the medical and veterinary institutions participating in the project to have joint efforts in investigating outbreaks of zoonosis and collection of samples from animal attendants and in-contact persons in the event of outbreaks detected in a livestock farm or holding.

Dr N. Hegde, NIAB, presented progress of the project including networking of various centres, preparation of detailed SOPs for animal diseases. He reported that more than 5000 serum samples have been collected from animals and approximately 200 serum samples from human have been collected by different centres so far and also presented their details.

Prof. Bedi, GADVASU, presented efforts made towards knowledge dissemination in the form of pamphlets, booklets, teaching model, teaching lectures etc. He also mentioned that a website is also being planned exclusively for One Health.

Dr Majumdar also made concluding presentation and also flagged various issues for consideration/ recommendations including 1) incorporation of AIIMS, Bhopal as a partner to ensure that central India has a Medical centre partnering with this and 2) inclusion of Wildlife research centre of MAFSU, Nagpur as a nodal partner for wildlife sample collection and analysis. He also requested for provision of inter institutional funding adjustments within the project to ensure appropriate utilisation of funds and facilitation of actively working partners.

Prof Ravindran, Prof Gupta and other members of PMC, after deliberations made following specific suggestions for implementation:

1. Include a table in the next progress report showing work done in past and fresh data generated during the interim period separately of reporting.
2. Lay down individual responsibilities by tabulating work specifically to be undertaken by each centre/Individual so that their achievements against that can be properly assessed. A table may be prepared with names of individual PIs/Institutions and their responsibilities – both commitments and deliverables as well as progress.
3. Since new reagents / diagnostic kits/ tests are being developed/ validated, 3rd party validation of these reagents/ kits/ tests by any collaborating centre was suggested. Details of reagents/ diagnostic kits to be developed during the project period may be shown clearly in the next report. This is the main objective that has innovation component and needs clarity. Details are not shown in the original proposal as well as in the 1st progress report. The names of PIs for each of the reagents/ kits may be shown in the table.
4. Explore possibilities of establishing bio repositories of samples collected for future resource.
5. Strategy has to be planned as done for the other animal samples for studies on wildlife : viz. which diseases to be covered under wildlife, sample size and diagnostic kits to be used etc .
6. The list of tools and reagents to be developed in the study should be determined well in advance (please see point number 3 above)

7. MOAs should be in place , if samples are collected from states agencies. 8. More effort from medical group on looking at historical data in order to derive sample numbers to be collected.

9. Web site to be up and running as soon as possible, SOP etc. may be displayed on website. 10. A definite policy in respect of IPR issues relating to publication and patenting of the output of the project should be framed in consultation with DBT.

11. Obtain approval of human and animal Ethical Committees and IBSC approvals for sample collection; if needed RCGM clearance for handling specific organisms. 12. There should be no charge for diagnostic tests required for the project , from the patients volunteering for the project work.

13. Pamphlets, booklets, teaching model etc. published for public awareness programme should be in simple and local languages besides English/ Hindi.

14. Keeping in view a lot of excitement in media, an official spokesman or institute should be identified for any interaction with media.

Based on the presentation, the PMC made following specific recommendations:

1. The Committee recommended inclusion of Wildlife Research and Training Centre, Nagpur (MAFSU) for wild life sample collection in place of WWF/ WII with same budgetary allocation. It was also suggested that WRTC, Nagpur should also collaborate with other wild life institutes/ departments/ universities for sample collection and cover expenses involved from the DBT budget allocated to them.
2. The Committee discussed inclusion of AIIMS, Bhopal and recommended it for financial support keeping in view of its strategic location in Central India and since no medical institution is involved from this region.
3. The Committee also recommended transfer of funds from one centre to another centre or across the centres within the approved budget for DBTs consideration and suggested that this type of programme needs financial flexibility. The Committee suggested to draft SOP booklet carefully and agreed on its publication which can be used across the groups involved in one health work.
4. Dr Tapan Datta's (Mizoram) request for change of equipment was also agreed within the funds allocated for equipment.

The Committee appreciated work done and rated as “Very Good” and suggested that next meeting may be conducted in physical mode at one of the centres.

The meeting was ended with a vote of thanks by Dr Jain and Dr Majumdar.



Prof. Y.K. Gupta



Prof. B. Ravindran