INDIA

INTEGRATED DISEASE SURVEILLANCE PROJECT (Credit 3952-IN)

FIFTH IMPLEMENTATION SUPPORT MISSION

AIDE MEMOIRE

April 30-May 22, 2007

1. A World Bank team[1] undertook the implementation support mission for the Integrated Disease Surveillance Project (IDSP) during 30 April-22 May, 2007 with technical support from WHO. During this period the Bank team worked closely with the Ministry of Health & Family Welfare (MOHFW) team led by Mr. Deepak Gupta (Additional Secretary, MOHFW) and Dr. Shiv Lal (Director for the IDSP and National Institute for Communicable Diseases); and included Dr. Ichhpujani (National Project Officer for the IDSP), Dr. Jagvir Singh (Public Health), Dr. Shashi Khare (Avian Influenza), Dr Shah Hossein, Chief Medical Officer (field visit coordinator), and project staff from the center and the focus states. The WHO team included Dr. Sampath Krishnan, Dr. Samuel and Dr Ritu Chowhan from the India office, and Dr. Nalini Ramamurty and Dr Ayana from the regional office. Dr. Sanjeev Upadhyaya, from USAID also participated in technical discussions and state reviews.

2. The Bank team compliments the Government of India, and Secretaries and other senior officers of the four states visited for their strong commitment to improve disease surveillance. The high quality technical discussions and effectively organized field visits helped the mission to successfully achieve its main objectives. During the mission, joint teams consisting of the Bank, WHO and officers from the Central Surveillance Unit (CSU) of IDSP visited the states of Maharashtra, Tamil Nadu, Gujarat and Haryana including cities of Mumbai and Chennai and undertook an in-depth assessment of implementation progress on the ground. In addition, consultations were held in Delhi with nodal officers from 14 project focus states to review the implementation progress and a meeting with chief health officers of four metro cities was held prior to the mission to discuss their draft plans for improving disease surveillance in urban areas. Agreements were also reached on the way forward for implementing Information Technology (IT) and Non Communicable Diseases (NCD) risk factor survey components of the project after detailed discussions with concerned entities and MOHFW. The team also reviewed the recently included Avian Influenza (AI) component of the project and agreed on specific actions to accelerate its implementation. The Bank team reported its findings at a wrap-up meeting, chaired by the Additional Secretary, Health and Family Welfare, on 22 May 2007. This Aide Memoire summarizes the findings of the review in two sections covering the IDSP (Section A) and of AI (Section B) components. A separate Aide Memoire is being issued for the Animal Health component of the AI.

3. **Key Project Data**

Project Data	**Project Performance Ratings**

[1] Members of the mission were GNV Ramana (Task Team Leader, SASHD), Martien van Nieuwkoop (Co-TTL, SASAR) Shanker Lal (Procurement), Mohan Gopalakrishnan/Arun Manuja (Financial Management), Ruma Tavorath, (Environment), S. Ojha and M. Gupta (Information Technology); K. Suresh (Public Health); Michael Maurice Engelgau, Gowrinath Sastry (NCD Risk Factor Surveys), and Nira Singh (Program Assistant)

Board Approval: July 8, 2004 *Effectiveness Date: October 28, 2004* *Original Closing Date: March 31, 2010* *Revised Closing Date (if relevant):* *MTR Date (Actual if completed), October, 2007* *Original Ln./Cr. Amt: US$ 68 Million* *Revised Ln./Cr. Amt:* *Amount Disbursed: US$ 10.17 Million*	*Summary Ratings*: *Last* *Now* Achievement of PDO MU MS Implementation Progress MU MS Financial Management: MS MS

Ratings: **HS**=Highly Satisfactory; **S**=Satisfactory; **MS**= Moderately Satisfactory; MU= Moderately Unsatisfactory; **U**=Unsatisfactory; **HU**=Highly Unsatisfactory; **NA**=Not Applicable; **NR**=Not Rated

Disbursements

4. The project has disbursed USD 10.17 million equivalent. Excluding Special Account advance of USD 6.56 million, the actual disbursement for project activities is USD 3.37 million equivalent covering the eligible expenditures reimbursed up to the quarter ended December 31, 2006. Thus, the project has disbursed USD 2.2 million equivalent since the November 2006 review. The budget allocation and funds flow continues to be satisfactory. For FY 2006-07 the project was allocated Rs. 800 million in the MOHFW budget and this includes a Rs. 148.6 million for Avian Influenza (human) component.

Section A: Review of Integrated Disease Surveillance Project

Progress in Key Issues in Implementation and Agreed Actions

5. Improved implementation pace is evident since the last review mission. With the strong oversight provided by the Additional Secretary and the Project Director and commitment shown by the CSU core team, most of the key actions agreed during November 2006 review have been completed. The CSU has put in place a system of weekly feedback to State Secretaries and Directors of Health on the regularity in reporting of data and disease trends which has helped in enhancing attention to IDSP by these senior officers.

Actions Completed by the MOHFW

- ③ Finalized implementation arrangements for the IT component after detailed consultations with states and the national program managers to ensure better integration of IT services for national health programs. The National Informatics Centre (NIC) has been identified by the MOHFW for implementing the IT component of the project and this decision has been communicated to the Bank.
- ③ Taken a policy decision to provide dedicated personnel for enhanced disease surveillance under the National Rural Health Mission (NRHM). However, in-line with the NRHM philosophy of bottoms-up approach, such positions will have to be included in the district and state action plans and this decision was communicated to the states.
- ③ Followed up with Indian Council of Medical Research (ICMR) for implementing NCD risk factor surveys. The IDSP and ICMR signed a formal Memorandum of Understanding (MOU) on March 19, 2007 and detailed implementation schedule has been agreed.

Actions Completed by the NICD

- ③ Identified 14 focus states for intensive follow-up to demonstrate successful implementation of IDSP.
- ③ Designated an officer as a focal point for each of the focus state to provide technical support and help resolving implementation bottlenecks.

- ③ Harmonized the fever reporting formats of National Vector Borne Diseases Control Program (NVBDCP) and IDSP in consultation with the Directorate of NVBDCP.
- ③ Organized consultations with the municipal health authorities from 4 metropolitan cities (Delhi, Mumbai, Chennai and Kolkata) for preparing implementation plans for urban disease surveillance. Plans shared by these cities are currently being reviewed by the CSU.

6. The review team is pleased to note significant improvement in surveillance reporting by the districts (from 43% in November 2006 to 87% by March 2007) in the focus states. Nearly two thirds of the 270 districts now share data with the CSU within one week of reporting period. There is also a steady improvement in reporting by the private providers and 63 districts (23%) are now able to capture data from this important sector. In the states of Gujarat, Tamil Nadu, Goa, and Uttaranchal some district and sub-district hospitals are also reporting data regularly.

7. Experiences during the past 6 months highlight the benefits of enhanced central oversight to lagging states. Visits made by senior officers of MOHFW and NICD helped in improving IDSP implementation in the states of Tamil Nadu, Uttarakhand, Karnataka, Gujarat, Haryana, HP, and Rajasthan. There has been progress in the implementation of AI component as well. The GOI has signed the amendment to include this component under the project, a national table top exercise was held to assess the preparedness for AI outbreak and consultations were held with the heads of identified laboratories on implementation arrangements.

8. However, due to limited capacities at block and district levels, assessment of the quality and completeness of surveillance reports, and more importantly, use of the data for local response continues to be weak. As pointed in the November 2006 review, presence of dedicated staff at critical operational levels and continuity of core staff is important for sustaining the progress made by the focus states. The mission is pleased to note that the GOI has initiated actions to provide dedicated staff and will be happy to initially support such staff under the project. To enhance operational skills of the core staff in disease surveillance, the NICD has prepared a two week field epidemiology training program with technical support from WHO.

9. Considering all the above, the overall project implementation is now rated "*moderately satisfactory*". With less than three years left in the project, it is important to sustain the progress made by the focus states and complement this with special efforts to gather data from major hospitals and private sector and improve local response to suspected outbreaks. This requires further enhancement of ongoing efforts promote state ownership through active involvement and participation of senior policy makers like State Secretaries and Directors of Public Health in IDSP and provide dedicated staff with adequate competencies to interpret data, improve preparedness and response to suspected outbreaks.

10. **Key Performance Indicators**

Indicator	Baseline	Progress by November 2006 Mission	Progress to Date	End–of-Project Target Value
1. Number and % of districts providing monthly surveillance reports on time	93 districts included under National Surveillance program for Communicable Diseases	About 50% (203) out of the 396 districts covered in Phase I and II are sharing weekly surveillance reports to CSU. However, the data is mainly limited to primary health care institutions and quality is variable.	About 70% (280 out of the 398 districts in phase I & II states) are sharing weekly reports as of end March 2007 to CSU. Reporting by focus states significantly improved compared to other states (87% vs. 46%) with 100% reporting by the states of TN, Gujarat and Haryana. Of the reporting districts, 66% in focus states and 46% in other states report in time. However, the data is generated mainly from to primary health care institutions and quality is variable.	>50% of districts
2. Number and % of districts in which private providers are contributing to disease information	None	15 out 49 districts from 3 Phase I states (Karnataka, Mizoram and Uttaranchal) reporting data from Private Sector	23% of districts in focus states (63 out of 270)) are reporting data from private sector and most of these are from the states of Kerala, TN, Gujarat, Haryana , Uttaranchal and Nagaland	At least 50% of the reporting districts
3. Number and % of laboratories providing adequate quality information	None	Data not available	20 and 16 out of 270 districts reporting data from L1 and L2 laboratories respectively	At least 50% of the laboratories provide adequate quality information
4. Number and % of responses to diseases specific triggers assessed to be adequate	Not existing	While all Phase-I and II states reported responses to disease outbreaks, disease specific triggers are yet to be established.	All states reported outbreaks. Number of these outbreaks and adequacy of response to be summarized in the annual report (2006 report expected by July 2007).	>75%

Mid Term Review and Agreed Key Actions (Detailed actions given in Annex I)

11. It was agreed that the next mission scheduled in November 2007 will be initiating the mid term review of the IDSP. During the restructuring of IDSP project for providing emergency assistance of USD 33 million equivalent for Avian Influenza, the Bank team has clarified that evidence of enhanced implementation will be required for considering additional financing for the IDSP. While high level attention is being given to the IDSP by the policy makers at the centre, promoting state ownership and enhancing local response still requires attention. Completing the following actions and enhancing the disbursements up to USD 8 million by the mid term review will be critical to enhance the implementation pace of the project (all agreed actions summarized in Annex I). The Bank will facilitate this process by bringing an experienced international consultant during June 2007.

MOHFW will

- ③ by June 30, 2007 inform the focus states to pilot operational feasibility of positioning an epidemiologist and a laboratory coordinator at state and 4 priority districts under the project;
- ③ by July 31, 2007 approve the plans recommended by the CSU for implementing urban disease surveillance programs in plans of four Metro cities and release funds;
- ③ by September 30, 2007 organize an experience sharing meeting for the Secretaries and Directors of Health & Family Welfare from focus states to learn from experiences of each other; and
- ③ by October 31, 2007 ensure that the IT inputs proposed under the project are in place with electronic data transmission and feedback systems fully functional, and call centre operational.

NICD will

- ③ by July 31, 2007 further rationalize the reporting forms under IDSP in consultation with the National Vector Borne Diseases control program and the project focus states;
- ③ by June 30, 2007 inform the focus states and NIC its decision to provide services of one of the existing data entry operators and train the medical records officers to improve passive case reporting by major hospitals including those treating infectious diseases;
- ③ by July 31, 2007 prepare National annual disease surveillance report for 2006 which will be a compilation of state epidemic and response taken reports; and
- ③ by July 31, 2007 complete the pilot of 2 week filed epidemiology training course and based on the feedback, finalize roll out plans for its implementation.

ICMR will

- ③ by October 31, 2007 complete the data collection, entry and analysis for 8 states included in the phase I of NCD risk factor surveys is completed

Focus states will

- ③ by October 31, 2007 position epidemiologist and laboratory coordinator at state level and by December 31, 20007 at 4 districts through contractual appointments;
- ③ by October 31, 2007 complete the pending training and ensure timely reporting by all districts;
- ③ by October 31, 2007 will have passive case reporting from the outpatient departments of at least one major hospital starting with 4-5 hospitals; and
- ③ by October 31, 2007 mandate and provide required inputs to Rapid Response Team (RRT) in a medical college at the state headquarters to monitor the outbreak responses and prepare state annual report.

Implementation Progress

Component I: Establishment and Operation of Central Surveillance Unit (CSU)

12. Since the last review mission in November 2006, several actions have been taken to enhance the effectiveness of CSU. IDSP is now better integrated with NICD divisions and focal points identified for each of the 14 identified focus states for oversight and trouble shooting. Each of these officers have made at least one field visits to their state since then. The CSU has developed a standardized checklist for reporting state performance by the focal points, WHO consultants and regional coordinators. The

Additional Secretary and Project Director continue to review the project implementation every week and are resolving IDSP implementation bottlenecks during their state visits. A system of weekly feedback on data reporting and disease trends to State Health Secretaries and Directors has been started and helped in a big way to enhance the attention of these senior officers to IDSP. However, there is still scope for further improvement of CSU functioning. The feedback to the states on the observations on field visit and follow-up on remedial actions continues to be slow, the regional coordinators positioned by the project are still not actively involved in monitoring, and more intensive efforts are required to enhance coordination between surveillance activities of different central programs especially vector borne diseases and polio. The progress in urban disease surveillance initiatives in 4 metro cities requires further acceleration and additional efforts are required to improve passive case reporting by hospitals including infectious diseases hospitals.

Agreed Actions

- *by July 31, 2007 the CSU will further rationalize the reporting forms under IDSP in consultation with the National Vector Borne Diseases control program and the project focus states;*
- *by June 30, 2007 inform the focus states and NIC its decision to provide services of one of the existing data entry operators and train the medical records officers to improve passive case reporting by major hospitals including those treating infectious diseases;*
- *by July 31, 2007 prepare National annual disease surveillance report for 2006 which will be a compilation of state epidemic and response taken reports;*
- *by July 31, 2007 complete the pilot of 2 week filed epidemiology training course and based on the feedback, finalize roll out plans for its implementation;*
- *by August 31, 2007, the CSU n collaboration with WHO will organize an experience sharing workshop for state surveillance officers and heads of state infectious diseases (ID) hospitals from focus states to evolve strategies to improve passive case reporting by I D hospitals;*
- *during the next 6 months, the Project Director will ensure that the officers identified for each focus state will undertake at least 3 state visits and the CSU will ensure completion of follow-up actions including feedback to states within one week of each visit;.and*
- *CSU, in consultation with WHO, will explore the possibility of additional technical support from the surveillance officers of National Polio Surveillance Project in non-polio endemic states. .*

Component II: State and District Surveillance Units

13. As mentioned in the summary, there has been a notable improvement in reporting by the 14 focus states. The mission tried to objectively assess the state performance using report cards (Annex II) and 50% of the states are ranked satisfactory (B and above). Generally, Phase II states tended to perform better than Phase I states. The efforts to obtain surveillance data from private sector require further enhancement as only 23% of districts in focus states report data from this important sector. Most states are still not collecting data from the outpatient departments of major and infectious disease hospitals, which are important sources of information for an early alert. The most critical bottlenecks the continue to affect the implementation include: (a) need for more flexibility to states to innovate; (b) lack of dedicated staff resulting in adding IDSP implementation as an additional responsibility to one of the existing program officers; (c) frequent turnover of program managers at district and state levels and inadequate arrangements to quickly reorient the new staff; (d) very low capacity especially at district and block levels to analyze and use surveillance data for local decisions and outbreak responses; and (e) poor coordination between IDSP and VBDCP teams resulting in unnecessary duplication of surveillance efforts. A detailed summary of the state visits is presented as Annex III.

Agreed Actions

- *by October 31, 2007 position epidemiologist and laboratory coordinator at state level and by December 31, 20007 at 4 districts through contractual appointments;*
- *by October 31, 2007 complete the pending training and ensure timely reporting by all districts;*
- *by October 31, 2007 will have at least one hospital in each district functioning as a sentinel center reporting passive surveillance data from outpatients;*
- *by October 31, 2007 mandate and provide required inputs to Rapid Response Team (RRT) in a medical college at the state headquarters to monitor the outbreak responses and prepare state annual report.*
- *by October 31, 2007 the focus states, as a part of the mid term review, will prepare proposals for improving IDSP implementation in their states such as establishment of sentinel reporting sites, creation of situation rooms, media monitoring, etc,. The CSU will have a technical committee consisting of independent experts and WHO to appraise and recommend state proposals for project support;*
- *All states will continue their efforts to position a mid-level officer with public health or field epidemiology background as officer on special duty to ensure continuity in project management.*
- *States with high burden of Vector Borne Diseases will explore the options for improving integration between IDSP and VBDCP as done by Tamil Nadu.*

Component III: Improving Laboratory Support

14. With the designation of a senior staff member of NICD as laboratory coordinator for the IDSP supported by a full time consultant, the attention to laboratory services from CSU is improving. The National Project Officer (NPO) and other project staff visited several states and prepared detailed guidelines for assessment of district public health laboratories and these guidelines are now being used by the states to assess additional inputs required under the project. The baseline survey covering 20 randomly selected district laboratories has been completed. The Panels for external quality assurance system (EQAS) have been prepared and the mission was informed that EQAS has been introduced in L3 labs of 12 focus states. Training manual for peripheral lab technicians has been printed. The main bottlenecks are: (a) need for a clear articulation of outputs envisaged from the district public health laboratory; (b) absence of a dedicated laboratory coordinator at state and district levels; and (c) timely completion of training for laboratory technicians and strengthening quality assurance systems.

Agreed Actions

- *by October 31, 2007, at least 40 district public health laboratories will be made fully functional and reporting weekly data as per the program guidelines.*
- *by July 31, 2007 one orientation program for state Microbiologists of selected priority states will be organized to disseminate the bio-safety guidelines and quality assurance protocols.*
- *by October 31, 2007 feedback on EQAS implementation in L3 labs will be shared with the Bank and plans for introduction of the same in L2 labs of focus states will be finalized.*

Component IV. Training for Disease Surveillance and Action

15. Training for state and district surveillance officers is mostly completed in all Phase I and II states. Many Phase I and II states also made progress in medical officer's and health workers training which is expected to be completed by October 2007. Tamil Nadu has made very good progress in training and over 80% of medical officers have received IDSP training. Remaining states should ensure timely completion of the training activities planned without which quality of reporting will suffer. The Bank team agrees to the suggestion from several States for further enhancement of original scope of training to cover all health workers and medical officers as this will assist all health staff to appreciate and actively participate in disease surveillance.

16. Following the findings of external evaluation of training in Phase I states and implementation experiences so far the CSU has prepared a detailed outline for a two-week field epidemiology course with technical inputs form WHO. This program aims to enhance core operational skills of district/state surveillance officers in analyzing the surveillance data and effectively undertake outbreak investigations. This course will be piloted in June 2007 and based on the feedback will be rolled out.

Agreed Action:

- ③ *by August 31, 2007, all Phase I and II states will complete first round of trainings for all Medical Officers including those working in Medical Colleges, district and sub-district hospitals and by September 30, 2007 for health workers, pharmacists and nurses;*
- ③ *CSU will organize annual orientation training for all state level surveillance officers and microbiologists who in turn will organize similar training for district surveillance officers; and*
- ③ *NICD will organize special Field Epidemiology Training Programs for IDSP staff during the next 2 months. This will be fine-tuned based on the feedback received and rolled-out nation-wide involving the regional centers of NICD.*

Information Technology

17. The implementation of this component was put on hold as MOHFW has constituted an expert group to review IT requirements of all national health programs and suggest measures for better harmonization. Based on the findings of this review and considering the sustainability of IT inputs under NRHM, the MOHFW has decided to use services of National Informatics Centre (NIC) which has presence in every district of the country to procure software and hardware for the project, and also provide human resources at district and state levels for implementation of IT services. To improve community participation, it was also decided to operate a toll free telephone service to receive information from community on disease outbreaks. The NIC will be engaging services of an agency to run a call centre for providing this service.

18. The original scope of networking was limited to data transfer. However, considering the increasing need for effective two way communication with the states and districts during disasters and outbreaks through video conferences and need for distance learning, the MOHFW has decided to expand the operational scope of networking. The MOHFW is keen to involve both central and state units actively in the distance learning program. For districts which have difficult terrestrial networks, the proposal is to use satellite network provided by Indian Space Research Organization (ISRO). While ISRO offers the connectivity free, there will be some initial investment for putting-up the systems which are procured by ISRO following their global tendering procedures. In addition, the MOHFW is proposing to use terrestrial network of Bharat Sanchar Nigam Limited (BSNL) for all districts which provides adequate band width for video conferencing.

19. The Bank team has indicated the feasibility of financing these inputs under the project provided procurement procedures agreed under the project are followed by NIC (or its sister agency) and ISRO. It was agreed that GOI funds will be used for activities that could not be financed by the Bank.

Agreed Actions

- ③ *by June 15, 2007, CSU will provide information requested by the Bank on selection of agencies and procurement procedures used for supply of hardware and software;*
- ③ *by August 31, 2007, the call centre operating toll free number for community reporting of outbreaks will be fully operational;*
- ③ *by October 31, 2007, the MOHFW will ensure that all IT inputs proposed under the project are in place with electronic data transmission an feedback systems fully functional.*

Surveys for Non Communicable Disease (NCD) Risk Factors

20. An MOU was signed in mid-March between MOHFW and ICMR. It has ICMR leading implementation of the NCD survey with a National Technical Advisory Committee that meets twice a year to advise and provide guidelines on technical and policy matters. The MOU has changed the role of the IDSP for the NCD survey and there is a concern that IDSP, with only a marginal role in the NCD survey, may become disengaged.

21. ICMR has experience of working with academic and research institutions but not with State Survey Agencies (SSA). This should not be an issue since the IDSP has created a relationship with the SSA and will facilitate redirecting leadership to the ICMR. A broad action plan has been developed for the entire first phase (April 2007 to March 2008). Field work is expected to begin in June/July 2007 and completion of the consolidated report of the Phase-I States by the NIMS in March 2008.

22. During the mission, much support and enthusiasm for NCD surveys was expressed by MOHFW leadership. They are currently proposing NCD prevention and control programs focused on CVD, diabetes, and stroke for the 11th Five Year Plan. The ISDP survey results should prove very useful in targeting these programs. Formation of a state "policy" group would go a long way in creating awareness about the value of NCD risk factor morbidity and its economic impact to the family and the nation. This "policy" group could include a local respected health professional who champions NCDs, state government NCD personnel, and broad community and NGO membership, and play an important role in communicating and dissemination of survey results. Further details on NCD risk factors presented in Annex IV.

Agreed Actions

- *by October 31, 2007, the ICMR will ensure data collection entry and analysis for Phase I states is completed by October 31, 2007.*
- *by August 31, 2007, all Phase I states where NCD surveys are being proposed during 2007 will establish a policy group to recommend state specific policies and strategies to address NCD risk factors.*

Financial Management

23. The financial management is rated moderately satisfactory. The project has reported an expenditure of Rs 275 million till March 31, 2007[2]. The project has filed claims for expenditure reported till the quarter ended December 31, 2006 which aggregates to Rs 202 million (net eligible expenditure). The disbursement is USD 3.371 million net of SA Advance (USD 10.171 million including SA Advance of USD 6.8 million)[3]. The budget and funds flow for the project has been satisfactory with the budget for the year 2007-08 being Rs 800 million which includes a provision of Rs 148.6 million for the Avian Influenza (Human Component).

24. The project has taken prompt action to recruit a new financial consultant at the CSU who is expected to join by the end of June 2007. There are however some vacancies of the project finance staff at states and district levels and the CSU is obtaining information on the same from all the states. It was agreed that this information would be compiled and shared with the Bank latest by June 15, 2007, and provided periodically in future as part of the six monthly Financial Monitoring Reports (FMRs). The

[2] The financial reports for the quarter ended March 31, 2007 is yet to be received from certain states and the expenditure is under-reported to that extent.

[3] Claims aggregating to USD 1.246 million are in the pipeline with CAAA.

audit reports and the FMR have been shared with the Bank. However there are some delays in reporting the expenditures incurred by the States/Districts. The state program managers should give sufficient attention to this aspect. The FMR for the six month period ended March 31, 2007 is due and the same would be submitted latest by May 31, 2007. Going forward the FMR should include the expenditures incurred under the Avian Influenza (Human Component) also. It was also agreed that the finance unit in the CSU would analyze and compile/consolidate the expenditure and the audit observations if any, in the audit reports received from the states and take appropriate actions prior to sending the reports to the Bank so that the actions can be initiated to address the observations within a reasonable period of time.

Agreed Actions for the CSU

- *by June 15, 2007 share FMR for the period ending 31 March 2007 including confirmation on expenditure incurred by Maharashtra on Bird Flu in 2005-06 (Rs. 1.4 million);.*
- *by June 15, 2007 communicate state-wise information on available finance staff, their training status including feedback on dates by which existing vacancies will be filled and training completed by June 15, 2007.*
- *by July 31, 2007, develop a system for regular flow of financial information from DSUs to SSUs, and from SSUs to CSU to ensure timely submission of FMRs to the Bank.*
- *by September 30, 2007 review the state audit reports for 2006-07 and take appropriate actions on auditor's qualifications and recommendations prior to sending them to the Bank..*

Procurement

25. Initially procurement of all inputs provided by the project to states was carried out centrally through Ms. Hospital Services Consultancy Corporation (HSCC). The details of bids invited and contracts awarded by HSCC for goods and equipments under Phase-I are provided in *Annexure* . All these items have been delivered after substantial delays and the MOHFW is analyzing the reasons for delay in working with HSCC.

26. After the restructuring in April 2007, the project would consist of 2 components: (a) an Avian Influenza (AI) component with Human Health, Animal Health and sub components; and (b) the residual IDSP component. The MOHFW has decided that services of HSCC will no longer be used for this project. From July 2006 the procurement of routine laboratory equipments such as autoclave, hot air oven and office equipment such as photocopiers and fax machines has been decentralized to states. The remaining procurement under the AI-Human and residual IDSP components will now be handled by NICD (up to Rs.5 million per contract) and the Empowered Procurement Wing (EPW) of MoHFW (above Rs.5 million per contract). The procurement under AI-Animal sub-component will be handled by the Bird Flu Cell being set-up under the Department of Animal Husbandry and Dairying, Ministry of Agriculture.

27. Procurement plans for Phase II (14 states) and Phase III (12 states) under IDSP were shared with the mission. At the central level, Binocular Microscope, Deep Freezer and ELISA Reader are proposed to be procured and the states will continue to procure the decentralized items. Estimated cost of items to be procured by NICD would be around Rs.160 million while estimated cost of decentralized items to be procured by States is Rs.60 million.

28. The contracts proposed for developing computerized surveillance system were also discussed during the mission. The MOHFW has taken a decision to use services of three government departments for procuring them: (a) The National Informatics Centre (NIC) for the software development, supply of hardware, setting up the call centers and for providing incremental staff for data management; (b) Indian

Space Research Organization (ISRO) for providing satellite networking for 400 locations; (c) Bharat Sanchar Nigam Limited (BSNL) for networking with all 800 locations planned. In addition, contracts are proposed for setting up a call centre for receiving information on disease outbreaks through a toll free number and for setting up a studio/video wall at New Delhi. The Bank will be able to finance the incremental operating costs incurred by these agencies and reimburse the cost of outsourced services/goods if the procurement procedures agreed for the project are used. Further information sought by the Bank on these contracts is yet to be shared.

29. NICD has initiated some actions to accelerate the procurement process. A full time procurement consultant has recently been hired. However, continuity of the consultant is doubtful due to the existing GOI norms on compensation paid to consultants. The mission therefore strongly recommends that MOHFW consider the option of using services of a human resources supply agency for providing such high end consultants. It is anticipated that entrusting the procurement responsibility to EPW will help in reducing the delays. However lack of monitoring of state and laboratory level procurement is an area of concern. The mission requested NICD to put in place a mechanism to monitor the decentralized procurement and also provide procurement review checklists to the chartered accountants auditing the state societies. A sample checklist was handed over to NICD by the mission. NICD was also requested to develop the procurement capacity of states by way of designating procurement staff at state level and imparting procurement training as part of FM training.

30. NICD was requested to keep the procurement documentation and data ready for the purpose of the post review by the Consultant to be contracted by the Bank. It was also suggested to compile the procurement related remarks/observations from state audit reports and forward to the Bank along with the observations on financial audit. NICD was also requested to obtain the current versions of the standard bidding documents. NICD was requested to obtain the clearance of the Bank for the technical specifications for the equipment to be procured.

Agreed Actions

- *by March 31, 2008 complete all the procurement at central level in line with the dates indicated in the procurement plans for residual IDSP and AI-Human components*
- *Share with the Bank the analysis for procurement delays including steps to minimize such delays in the action plan to enhance project implementation.*
- *Improve the monitoring of state/laboratory level procurement and initiate procurement*

Environment

31. The Bio-Safety Manual has been completed and is being distributed to laboratories in various states. A review of the Baseline Survey report on Health, Safety and Environmental practices indicates that waste management practices are lacking in many states, primarily due to lack of appropriate equipment, safety gear and personal protective equipment. The L3 laboratories seem to have better practices in most states. The survey, however, was weak in that it lacks detailed information on key health and safety issues and on operational issues, such as worker practices and waste management practices using existing equipment. The mission was also informed that training programs have been conducted at National Institute for Communicable Diseases. Given that all agreed activities have been undertaken adequately, the mission rates this component as satisfactory.

32 However it should be noted that activities are being undertaken in a slightly ad-hoc manner, without strategic or holistic planning. The mission recommends that the existing Environmental Management Plan be utilized to develop an Action Plan clearly define training requirements, procurement guidance, IEC requirements, contractual arrangements for using services of common waste treatment

facilities[4] and establishment and implementation of reporting and monitoring systems. Such detailed guidance by the CSU is critical for the states to improve bio-safety in laboratories in a systematic and organized manner. The IDSP Animal Husbandry team indicated that there is a proposal for procurement of mobile incinerators under the project. The mission advises that as per Bank policy, procurement of incinerators is not eligible and this proposal should be reviewed for more environmentally sound alternatives.

Agreed Actions

- ③ *by October 31, 2007, the CSU to prepare an action plan to guide the states for effective implementation Bio-Safety guidelines;.*
- ③ *MOHFW initiate efforts to harmonize operational guidelines for improving bio-safety in laboratories under all national health programs under NRHM.*

Section B: Avian influenza – Human Health Component

33 The Bank team is pleased to note sustained progress in the implementation of the human health component for AI support under the project. The signed amendment to include AI under the project was received from GOI on April 16, 2007. The NICD has organized a consultation with coordinators of laboratories proposed to be included under the project and discussed implementation arrangements including funds flow. A table top exercise was organized with the states and other stakeholders in January 2007 to assess the country's preparedness for AI outbreak.

34 Procurement plan for avian influenza component was also shared with the Mission. Avian Influenza (Human Component) will require the procurement of laboratory equipment, reagents/kits and consumables and renovation of labs. Total value of the procurement will be about Rs120 million. The items (such as office equipment, UPS, generators, inverters, stabilizers, autoclave, hot air ovens, etc.), which are covered by existing DGS&D rate contracts, would be purchased by states. The Bank team was informed that some of the technical specifications are being updated.

Agreed Actions

- ③ *NICD to sign MOU with the identified laboratories and release funds by July 31, 2007.*
- ③ *Update technical specifications for equipment and obtain required clearances immediately and to ensure completion of the central procurement by October 31, 2007.*
- ③ *CSU to complete refresher training for Rapid Response Teams in the remaining states by October 31, 2007.*

Annex 1: Agreed Actions during the Next Six Months
Annex 2: Report Cards for Focus States
Annex 3: Technical Note on Implementation by States

Annex I

Integrated Disease Surveillance Project (IDPSP) - Credit 3952-IN)

Agreed Actions for IDSP during the Next Six Months

Agency Responsible	Action	By When

[4] The Biomedical Waste Management Rules of the GOI mandates all facilities generating biomedical waste, including laboratories, have to utilize the services of Common Waste Treatment Facilities located within a 150 km radius for treatment and disposal of its biomedical waste which will obviate the need to procure autoclaves and develop deep burial pits.

MOHFW	1. Inform the focus states to pilot operational feasibility of positioning an epidemiologist and a laboratory coordinator at state and 4 priority districts under the project;	June 30, 2007
	2. Approve the plans recommended by the CSU for implementing urban disease surveillance programs in four Metro cities plans and release funds;	July 31, 2007
	3. Organize an experience sharing meeting for the Secretaries and Directors of Health & Family Welfare from focus states to learn from experiences of each other;	August 31, 2007
	4. Ensure that the IT inputs proposed under the project are in place with electronic data transmission and feedback systems fully functional, and call centre operational.	October 31, 2007
	5. Initiate efforts to harmonize operational guidelines for improving bio-safety in laboratories under all national health programs under NRHM	July 31, 2007
Central Surveillance Unit	1. Further rationalize the reporting forms under IDSP in consultation with the National Vector Borne Diseases control program and the project focus states;	July 30, 2007
	2. Inform the focus states and NIC its decision to provide services of one of the existing data entry operators and train the medical records officers to improve passive case reporting by major hospitals including those treating infectious diseases;	June 30, 2007
	3. Prepare National annual disease surveillance report for 2006 which will be a compilation of state epidemic and response taken reports;	July 31, 2007
	4. Complete the pilot of 2 week filed epidemiology training course and based on the feedback, finalize roll out plans for its implementation;	July 31, 2007
	5. Organize an experience sharing workshop in collaboration with WHO for state surveillance officers and heads of state infectious diseases (ID) hospitals from focus states to evolve strategies to improve passive case reporting by I D hospitals;	August 31, 2007
	6. Ensure that the officers identified for each focus state will undertake at least 3 state visits and the CSU will ensure completion of follow-up actions including feedback to states within one week of each visit;.and	Continuous
	7. CSU, in consultation with WHO, will explore the possibility of additional technical support from the surveillance officers of National Polio Surveillance Project in non-polio endemic states.	August 31, 2007
	Improving Laboratory Support: 1. Ensure that at least 40 district public health laboratories are made fully functional and reporting weekly data as per the program guidelines. 2. Organize one orientation program for state Microbiologists of selected priority states to disseminate the bio-safety guidelines and quality assurance protocols. 3. Provide feedback on EQAS implementation in L3 labs and prepare plans for introduction of the same in L2 labs of focus states	October 31, 2007 July 31, 2007 October 31, 2007
	Training for Disease Surveillance and Action:	

	1. Complete the pilot of 2 week field epidemiology training course and based on the feedback, finalize roll out plans for its implementation.	July 31, 2007
ICMR	*Surveys for Non-communicable Diseases* 1. Ensure data collection entry and analysis for Phase I states is completed	October 31, 2007
AI – Human Component	1. Sign MOU with the identified laboratories and release funds 2. Update technical specifications for equipment and obtain required clearances immediately and to ensure completion of the central procurement 3. Complete refresher training for Rapid Response Teams in the remaining states.	July 31, 2007 October 31, 2007 October 31, 2007
	Financial Management: 1. Share FMR for the period ending 31 March 2007 including confirmation on expenditure incurred by Maharashtra on Bird Flu in 2005-06 (Rs. 1.4 million); 2. Communicate state-wise information on available finance staff, their training status including feedback on dates by which existing vacancies will be filled and training completed; 3. Develop a system for regular flow of financial information from DSUs to SSUs, and from SSUs to CSU to ensure timely submission of FMRs to the Bank; 4. Review the state audit reports for 2005-06 and take appropriate actions.	June 15, 2007 June 15, 2007 July 31, 2007 July 31, 2007
	Procurement 1. Complete all the procurement at central level in line with the dates indicated in the procurement plans for residual IDSP and AI-Human components; 2. Share with the Bank the analysis for procurement delays including steps to minimize such delays in the action plan to enhance project implementation.	March 31, 2008 August 31, 2007
	Environment Plan 1. prepare an action plan to guide the states for effective implementation Bio-Safety guidelines	October 31, 2007
State Surveillance Units	1. Ensure positioning of epidemiologist and laboratory coordinator at state level and by October 31, 20007 at the district level through contractual appointments under the project; 2. Complete the pending training and ensure timely reporting by all districts 3. Will have passive case reporting from the outpatient departments of at least one major hospital starting with 4-5 districts; 4. Mandate and provide required inputs to Rapid Response Team (RRT) in a medical college at the state headquarters to monitor the outbreak responses and prepare state annual report. 5. All Phase I states where NCD surveys are being proposed during 2007 will establish a policy group to recommend state specific policies and strategies to address NCD risk factors.	August 31, 2007 October 31, 2007 October 31, 2007 October 31, 2007 October 31, 2007

Annex II

REPORT CARDS FOR FOCUS STATES[5]								
State	**Reporting**	**Dist. PH Lab Assessment and Strengthening**	**State & Dist. SO training**	**Medical Officer's training**	**Para Medical Worker Training**	**Staffing of SSU & DSU**	**TOTAL**	**RANK**
Major States								
Tamil Nadu	3	2	1	3	3	0	12	A
Gujarat	4	2	1	1	1	0	9	B

[5] Assumptions used for the first report card

I. Reporting: 5= Full reporting incl. Public Hospitals and Private sector; 4= Full reporting from all public sector units incl. hospitals; 3= >75%districts reporting; 2=50-75% districts reporting; 1=1-50% districts reporting; 0= Nil reporting

II. District PH lab assessment & Up-gradation: 2= up-gradation started, 1=completed assessment 0=Not completed

III. State & District Surveillance Officers Training: 1=>75%; 0=<75%

IV. Medical Officers Training: 3= > 80% of all, 2= < 80% of all, 1=>75% of PIP; 0=<75% PIP

V. Para Medical Worker Training 3= > 80% of all, 2= < 80% of all 1=>50% of PIP; 0=<50%

VI. Staffing of State and District Surveillance Units: 1=> 80%; 0=<80%

VII. Rank: A= 12+; B=9-11; C=5-8 D=<5

Karnataka	3	2	1	1	1	1	9	B
Haryana	3	2	1	1	1	1	9	B
Kerala	3	1	1	1	1	1	8	C
Rajasthan	3	2	1	1	1	0	8	C
Maharashtra	2	2	1	1	1	0	7	C
Andhra Pradesh	1	2	1	1	1	0	6	C
Orissa	3	2	1	0	0	0	6	C
West Bengal	0	1	1	0	0	0	2	D
Smaller States & Union Territories								
Goa	4	2	1	1	1	1	10	B
Himachal Pradesh	4	1	1	1	1	1	9	B
UttaraKhand	3	1	1	1	0	1	7	C
North Eastern States								
Mizoram	3	2*	1	1	1	1	9	B
Nagaland	3	2*	1	1	1	1	9	B
Maximum Score	**5**	**2**	**1**	**3**	**3**	**1**	**15**	

* State laboratories

Annex III

Technical Note on IDSP Implementation by States
Prepared by State Visit Teams

1. The review mission has attempted to rank the states performances against a total score of 15 points. This is an evolving method for ranking and given the need for ensuring timely reporting of events (disease occurrence) this aspect was assigned highest score (5) and the remaining 10 points were distributed for other project activities such as completion of laboratory assessment and beginning to strengthen, positioning of incremental staff and completion of training of staff working at different levels of the health system. At this point of time, these scores are based more on quantitative achievements rather than quality of each parameter. As the implementation progresses, this aspect will receive more attention while preparing the state report cards.

2. The mission's overall assessment was that most of the Phase I and II states have started reporting probable cases from primary health centers and suspect cases from few sub centers. State visits by NICD/WHO and WB teams and regular reviews being undertaken by the Additional Secretary (DG) and Director NICD have had a positive influence on implementation pace in all states and exceptionally good results are seen in the state of Tamil Nadu and Gujarat. However, data from public hospitals and private sector, which provide a significant part of out patient care is still not being captured and the need for regularity and quality, is not being stressed. A feedback from the CSU has also contributed to the State Secretaries (H&FW) reviewing the progress and betterment in performance. Most importantly the use of data for program decisions, especially for local response, is very limited. There have been inordinate delays in recruiting additional staff and training of key functionaries like medical officers and health functionaries, and upgrading the district laboratories for public health investigation purposes. Frequent turn over of key staff and low ownership of the project by state administration contributed to the slow implementation progress.

States with Satisfactory Implementation

3. Based on the above criteria, performance by states of Tamil Nadu, Gujarat, Goa, Haryana, Karnataka, and Himachal Pradesh can be rated satisfactory. As mentioned above, even these states are still to improve the reporting from major hospitals and private sector. Except for Tamil Nadu, Gujarat, Goa and Haryana, the remaining states in this group are still to complete the training for all medical officers and health workers.

States with Moderately Satisfactory Implementation

4. The states of Kerala, Mizoram, Andhra Pradesh, Rajasthan, Pondicherry, Maharashtra and Nagaland fall under this category. The main factors that contributed for slower implementation include delay in training of Medical Officers and health staff. Recruitment and continuity of state and district level surveillance staff has been also a problem in these states.

States with Moderately Unsatisfactory Implementation

5. In this group of states none of the components used for ranking states are showing improvement. The state of Orissa which very successfully implemented disease surveillance during super cyclone is also lagging behind in transition to new IDSP requirements and so are Madhya Pradesh, Manipur, Meghalaya and Tripura in the north east. The lack of understanding of the value-add of the project activities and urgency in implementing the agreed activities in the respective states are also contributory factors apart from other competing priorities.

Phase III States

6. Eight states/UTs including UP, Punjab, J &K, Assam, Meghalaya, Bihar, A&N Islands and Daman and Diu. Only 3 of them have submitted their state implementation plans (SIPs). Considering the implementation experiences so far, it would be highly desirable to provide TA support to these states to help them to evolve SIPs relevant to their respective needs and capacities rather than providing standardized inputs as has been done so far.

Program Management

7. Experiences so far highlight that without full time dedicated staff , the implementation of surveillance activities do not get adequate attention as a majority of the IDSP project managers in the state and districts have other key responsibilities. Multiple responsibilities limit their time and attention for the IDSP. Further, quick rotation/turn over of the persons holding IDSP charge also adversely affected the implementation. Some of the Phase I and II states are yet to complete recruitment of incremental staff. This time it also came to light that without incremental staff the surveillance in major hospitals is not going to be realized. However discussions with the Secretaries of Health & Family Welfare of the three State governments (Maharashtra, Gujarat and Tamil Nadu) by the mission this time, indicate more ownership and gives hopes of their addressing the challenges of surveillance in major hospitals, designating dedicated officers at district level and recruiting incremental staff and streamlining the Public Health Laboratories especially for bio-safety, environmental safety and waste care management. The fact that NIC will take care of recruiting the data entry staff may ease the pressure on the state governments.

Recommended Actions

- *All priority States will post a dedicated officer for the IDSP at the state level and if possible at district level*
- *To ensure continuity, one mid level officer with public health or field epidemiology training program would be designated as officer on special duty for IDSP at state level*
- *MOHFW agrees to sanction a data entry operator's post in all public sector Hospitals with an outpatient attendance of at least 15,000 per month in all priority States*
- *States with high burden of Vector Borne Diseases, would explore the possibility of integrating IDSP with Vector Borne Diseases Control Program*
- *From next mission continuity of the IDSP managers at state and district levels and institutionalizing the passive surveillance in major hospitals and universal precautions and waste disposal in L2 and L3 laboratories will be used as indicators for ranking the state performance*

Training of Staff

8. The training of state/district surveillance unit staff and Rapid Response Team (RRT & District TOT) members entrusted to the regional training centers have been progressing fairly well. Between the November 2006 mission and now there has been good progress in the training of medical officers and health staff in majority of states. Except Tamil Nadu and Goa, no other state has completed the training. Majority of the state have also expressed the need for training all the MOs and Health Workers including pharmacists in medical college, district and sub-district hospitals. Due to inordinate delay in training of field staff, data reporting is also delayed (as one can observe that only half of the PHCs and one third of the sub-centers in general in majority of the states are sharing the reports in time). Generally they wait for the completion of training of all doctors/ staff in the district to start reporting.

Recommended Actions

- *All the medical officers training in Phase 1 and 2 districts will be completed by July 2007, followed by the health staff and pharmacists by end-September 2007*

- *The training of health staff and pharmacists will immediately follow the training of medical officers of any PHC and hospitals in the district*
- *All PHCs, dispensaries and hospitals will maintain a surveillance register and facilities where doctors are trained will start reporting data without waiting for completion of training of all doctors and paramedical (including pharmacists) staff*

Reporting of Surveillance Data

9. The central core of the IDSP is to start acting on surveillance data that has been generated. Therefore the mission gives highest importance to it in grading the progress of districts/states. In most states the data that is being gathered is mainly from primary health centers and health staff and data from district hospitals and other major facilities like infectious diseases hospitals in the public health sector is rarely included. Data collection from private nursing homes or practitioners as envisaged under the IDSP is yet to go to scale.

Recommended Actions

- *All out effort will be made to gather data from major general and infectious disease hospitals. For such facilities, the option of the data entry operator visiting the district hospital/Medical college hospitals and facilitates for collation of data from different departments should be considered.*
- *For facilities with more than 15,000 patients a month, consideration may be given to appoint an independent data entry operator for collation of data from multiple OPDs*
- *Similarly 5-10 sentinel private hospitals/practitioners in each district (1-2 per Tehsil and 3-4 in District headquarters) with large clientele should be identified and data should be regularly collected from them using services of the data entry operators*
- *Sub-district hospital and the PHC out-patient data will start flowing to district surveillance unit every week immediately after the training of the MOs*
- *Health workers can bring their data to the weekly PHC meeting or on the days they go to collect vaccine for immunization activity.*
- *Lay reporting may be encouraged with specific responsibility for investigating the same for confirmation and inclusion in the surveillance data thereafter*

Laboratory Surveillance

10. The public health laboratories are few and far in the current system. Their utility is far reaching in the control of communicable diseases. The routine Malaria parasite and AFB for Tuberculosis is being done fairly well and does not have to be interfered with. However, there is a need to develop one public health laboratory in each of the major districts (with a million or more population). The states have to make active efforts in getting the district/medical college laboratories assessed to identify the ones with potential to serve as Public Health Laboratory and develop the same. Many states have completed this exercise and have to start strengthening them to fulfill the IDSP needs. The mission's general observations were:

- Lab personnel aware of IDSP. Generally lack awareness on bio-safety and waste disposal.
- Waste disposal as per the recommended method is non-existent in the public health laboratory, malaria clinic and the district hospital.
- The microbiology departments of the teaching medical college hospitals utilize the hospital waste disposal system for laboratory wastes.
- Building infrastructure of the sites visited is satisfactory but for back up for power supply.
- Standard IDSP reporting formats are not available at any of the sites. Each site uses its own reporting formats, reporting frequency and reporting structure.

- Standard operating procedures for the laboratory tests, maintenance of equipment and waste disposal are not in place.

Recommended Actions

- NICD will also arrange for the standardization of some the existing rapid diagnostic kits and recommend tier use fully equipping the laboratories.
- CSU should arrange the training program for at least state HQ and a few District Training centers, focusing on SOP, QC, EQA, Equipment maintenance, trouble shooting. It should include a half-day session on reporting with actual data. It also should emphasize bio-safety and waste management.
- Manpower: Microbiologist to be employed in all district Public Health Laboratories as lab coordinator with responsibilities for bacterial/viral cultures and oversight responsibilities on L1 in districts.
- Standard/minimum infrastructure, personal protective etc and provision for uninterrupted power and water supply during daytime be ensured.
- Standard equipments to be recommended for supply and a method of AMC for critical equipments should be in built.
- Laboratory waste disposal to be given attention and guidelines drawn up for all levels

State and District Surveillance Committees

11. While all state and district committees are formed in phase 1 &2 states, their periodical meeting and solving the implementation problems is not visible. Not all committees have yet formalized the induction of the representatives of Animal Husbandry Department in the committee that is very important in the light of avian flu threat. The Major Hospitals and infectious diseases hospitals are very often not under the administrative control of Director of Health and Family Welfare Services and hence the data from these institutes is not shared. Since these institutions attract large number of infectious disease patients it is of great value to look at the outpatient and inpatient data of these facilities to know the trends of diseases in the district as a whole.

Recommended Actions

- *The state Principal Secretary, Health and Family Welfare will initiate action to induct the Secretary, Animal Husbandry department in the state/district coordination committees.*

- *The state Principal Secretary Health and Family Welfare will initiate coordination with the departments of Medical Education and Indian System of Medicine and City CorporationsCcity Municipalities for reporting of identified conditions by all institutions in the state.*

- *The State and District Surveillance committees will meet at least once every quarter to review the outbreaks and response mechanisms and help in resolving implementation problems such as recruitment of incremental staff, or flow of data, and outbreak containment measures.*

- *The district Surveillance committee to review surveillance data disaggregated by blocks/Tehsils against pre-set triggers to identify impending outbreaks and assess preparedness to respond to such events.*

Annex IV

Report on discussions held during 26 to 30 March, 2007 regarding Progress in NCD Survey Component of IDSP since the Last Mission in November 2006

1. The NCD survey component of IDSP could not take off due to various reasons. A number of changes in the scenario have taken place since the last Review Mission. The most important one is the **signing of MOU between IDSP and ICMR**. However, this event did take place on 19th March '06.

2. The **total responsibility of the NCD survey component of IDSP has shifted to ICMR.**

3. **Progress** was seen in the following areas:

- Identification of **members for the National Technical Advisory Committee [NTAC]** was completed and this will get formalized by 15 April, 2007.
- It was envisaged that **NTAC would meet twice a year** to review the work progress of field surveys and the results at the State level. They would help MOHFW and ICMR to develop strategies to be adopted for modification of risk-behaviors in the population.
- The **National Institute of Medical Statistics [NIMS] will take up the responsibility of the National Nodal Agency [NNA]**. The TOR for the NIMS is in the final stages of preparation by the ICMR and will be signed very shortly.
- A meeting was held with ICMR, NIMS and other experts from different organizations who had earlier participated in a similar exercise. Based on these deliberations, **the ICMR & NIMS have agreed to:**
  - Increase the number of PSUs to be covered from 80 in a State [40 from Urban areas and 40 from Rural areas] to 100 [50 Urban and 50 Rural]. However, the numbers of households that will be covered remain the same [50 per PSU]. This modification would result in a larger geographical coverage. The selection methodology of households in the selected PSU remains unaltered. In other words, **the total coverage of households in each State would now be 5000**.
  - The actual number of persons to be interviewed in each of the selected household will be: **ALL of 55-64 years age and one member in the age group of 15-54 years**. Kish method would be adopted to select the person in the age group of 15-54 years. This procedure would reduce the bias of 'uniformity' in behaviors of different members within the selected family on the estimates that would be worked out from the data-base, to a great extent.
  - **The questionnaires - households as well as that for individuals have been modified** so as to be more pragmatic in data collection keeping in view the utility of the information to serve the overall objective of IDSP.
  - **The questionnaires [modified] need be pre-tested** in the field before they are finalized and the Field Manuals appropriately modified and put forth before the **NTAC for approval.**
  - After completion of the above activities, the **TOT program can be initiated in May '07.**
  - To initiate steps to **critically evaluate the feasibility of including blood cholesterol** in Step 3 of the survey protocol and its inclusion may be considered in Phase II states.

4. **All survey instruments will be provided by ICMR.** Equipment used in NFHS III surveys was supplied by MOHFW and hence the same will be utilized for the current surveys also. Glucometers and other equipment [not available with MOHFW] will be purchased by ICMR and provided to the State survey agencies.

5. **The State survey agency will obtain the clearance from its Ethical Committee** so as to undertake biochemical estimations like blood glucose and cholesterol. **The ICMR will also obtain clearance from its Ethical Committee in this regard.**

6. **State level IDSP officer will act as a facilitator** to the State survey agency in conducting the survey in selected areas of the State.

7. The CMO, IDSP-NCD, will also communicate to the **District level IDSP officer to extend cooperation to the survey teams**. This can be done if ICMR/NIMS shares the list of areas [name of village, tehsil, and district] selected in each State for survey well in advance. The State survey agency could also get in touch with the State IDSP officer in this regard.

8. **Written/Signed consent forms will be obtained** from each individual selected for this purpose before blood samples are drawn.

9. **NIMS will develop and supply the appropriate software** to the State survey agencies for data entry, data checks, data cleaning and analysis to generate the tables that go into the State Report.

10. **NIMS will train the appropriate personnel** identified by the State survey agency who will be responsible for data entry and analysis. IDSP will extend its support in this regard to the NIMS.

11. **IDSP needs to inform the different State institutions/organizations**, who have signed the MOUs to participate in NCD surveys, the changed scenario **and the current role of ICMR in NCD surveys of IDSP**. The State survey agencies need to report henceforth to ICMR with respect to NCD surveys. These MOUs need to be transferred to ICMR. This will be done by the IDSP before 10th April '07.

12. The suggestion of **forming a State-level Advisory body** may be constituted by the State survey agency with 4-5 members [like a reputed physician, senior public health specialist, an NGO or any other person(s)] to provide broad guidance in writing the actions as recommendations that have policy implications with respect to NCD behavior changes to the State government. However, adequate care should be taken so that it does not affect the smooth functioning of the survey work and analysis of the data.

13. MOHFW has to initiate steps in **dissemination of survey results** to various user agencies in the country through seminars, workshops, media releases, and develop appropriate IEC material to reduce high–risk behaviors of NCD.

14. MOHFW is in the process of including a number of programs addressing the NCD in the 11th Five Year Plan document. The results of these NCD surveys will allow targeting and improve the efficiency of interventions.

15. Completion of the NCD surveys within a reasonable timeframe is possible ONLY if dedicated staff for the project are made available by the respective organizations. Further, certain actions of a given agency are linked to the timely action taken by the other agency and hence the **urgent need to have an effective coordination mechanism** is in place to avoid any further delays.

16. The survey will collect demographic, NCD risk behaviors, and blood specimen (capillary) information. While the health risks to participants are low, ethical and human subject's review of the survey protocol is required. Such **clearances** are a must at the national level (ICMR) and at the state level. All survey participants will also be asked to **sign consent forms.**

17. The final revision of the sample design should make it somewhat more efficient and the survey questionnaire has been shortened with an **increased geographical coverage** of the PSUs.

18. A **cholesterol measurement protocol will not be available for the next 3 to 4 months**. The strategy currently is to implement the survey with only glucose measurement in Phase I states.

19. During the first phase, performance of the various instruments and measures will be assessed and modifications (e.g., cholesterol, cardiovascular disease morbidity question) may be considered for **addition in the survey protocols for Phase 2**.