Integrated Disease Surveillance Project (IDSP) (P073651)
Aide-Memoire of the Joint Implementation Review of October 31-November 4, 2011

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A. INTRODUCTION

1. A Joint Implementation Review (JIR) of the Integrated Disease Surveillance Project (IDSP) was conducted by the World Bank with technical support from the World Health Organization (WHO) during October 31-November 4, 2011[1]. The review team held discussions with the Bird Flu Cell (BFC) of the Department of Animal Husbandry, Dairy and Fisheries (DADF) to assess implementation progress of the Animal Health Component; and the Central Surveillance Unit (CSU) within the National Center for Disease Control (NCDC) as well as the State Surveillance Officers from nine priority states to ascertain progress with the Human Health component. The review also involved joint field visits to selected states[2] to assess implementation progress of both the human and animal health components of the project.

2. The review team would like to thank Dr. R. S. Shukla, Joint Secretary, Ministry of Health and Family Welfare (MOHFW) and Dr. L. S. Chauhan, Director, NCDC and Project Director, IDSP for fruitful discussions during the review. The team would also like to place on record the excellent support extended by Dr. Jagvir Singh, the National Project Officer (NPO) for IDSP and the CSU team, in organizing the Joint Monitoring Review as well as the field visits on behalf of the MOHFW. The team also expresses its gratitude to Mr. Rajveer Singh Rana, Joint Secretary, DADF, Ministry of Agriculture; Mr. A. B. Negi, Joint Commissioner; and officials at Regional Animal Disease Diagnostic Laboratory, Pune, Guwahati and Bangalore, for their cooperation, valuable inputs and support extended to the task team during the mission. In addition, the review team would like to thank the state and district surveillance units of Karnataka, Gujarat and Maharashtra for organizing very useful field visits during the JIR.

3. The objective of the JIR was to, through field visits and discussions with the IDSP and DADF teams, review

(i) implementation progress of activities planned and supported by the project in each of the nine priority states and at the central level;
(ii) performance against benchmarks agreed during the previous mission;
(iii) compliance of project with environmental and social safeguards;
(iv) financial management and performance; and
(v) progress with planned procurement.

B. KEY PROJECT DATA

		Summary Ratings	Last	Current
Approval Date	July 8, 2004	DO	**MS**	**MS**
Original Closing Date	March 31, 2010	IP	**MS**	**MS**
Revised Closing Date	March 31, 2012	Financial Management	**MS**	**MS**
Original Credit Amount	SDR 46.9 million (or USD 73.87 million equivalent)	Project Management	**MS**	**MS**
Credit after Cancellation	SDR 41.478 million (or USD 65.56 million equivalent)	Counterpart Funds	**S**	**S**

[1] Members of the review team : **World Bank**: S. Nagpal (Task Team Leader), R. Samantaray (Avian Influenza Animal Health), S. Balagopal (Procurement), M. Mamak and S. Gupta (Financial Management), S. Mishra (Social Development), R. Tavorath (Environment), S. Pinto (Operations), K. Suresh (Public Health), V. Khanna, A. Ram dass and N. Singh (Program Assistants); **WHO**: S. Krishnan (Epidemiology); and R. Chauhan and A. Sharma (Microbiology).

[2] The states of Gujarat, Maharashtra and Karnataka were visited during the mission to review progress with the human health component; and the states of Maharashtra, Karnataka and Assam were visited to review progress with the animal health components.

Amount Disbursed	SDR 17.45 million (or USD 27.04 million equivalent)	Procurement	**MU**	**MU**
Undisbursed Amount	SDR 24.03 million or USD 37.85 million equivalent)	M&E	**MS**	**MS**
		Legal Covenant	**C**	**C**
		Safeguard	**MS**	**MS**

4. The IDSP became effective on October 28, 2004. It was restructured on February 14, 2007 following a request from the MOHFW through the Department of Economic Affairs (DEA) to include support to India's Avian Influenza program in response to the global influenza pandemic that threatened animal and human health. The project was restructured once again on March 29, 2010 to accommodate

- a revised, clarified and specific Project Development Objective (PDO);
- reduction in the number of project components from five to three;
- a sharpened focus–a phased roll out in 35 states was amended to support implementation in nine priority states;
- a revised results framework with consolidation of outcome indicators and clarified targets;
- deletion of decentralized expenditure and BSL IV labs from the avian flu component;
- strengthened project implementation through additional Human Resources (HR) and establishment of Financial Management (FM) Cells at MOHFW and DADF;
- Use of procurement agents for MOHFW/DADF;
- Cancellation of USD 8 million; and
- Extension of the project closing by two years, until March 31, 2012.

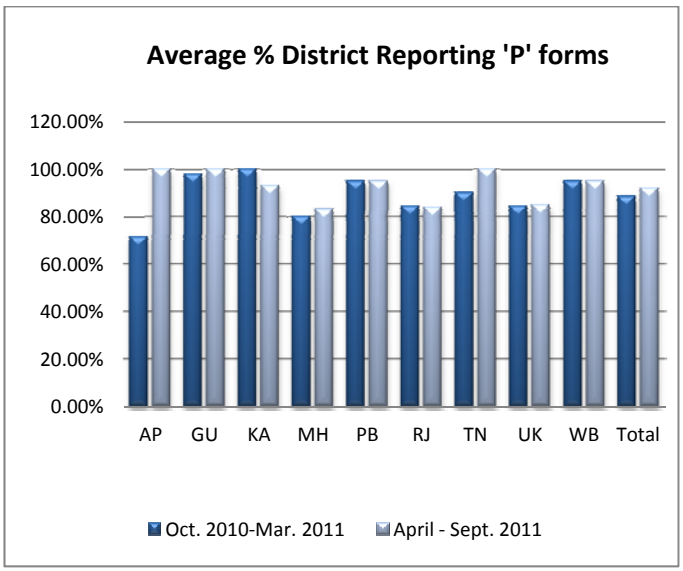
5. Despite responding with alacrity to a changing external environment, the project proceeded at a slower than expected pace in leveraging the IDA credit to implement the ambitious (and subsequently toned down) project implementation plan on account of limited capacity both at the Central Surveillance Unit (CSU) and the State Surveillance Units (SSUs) and the much delayed facilitatory processes (e.g.: Expenditure Finance Committee meeting) emanating from within the respective government bodies. Since mid-2010, however, the project made significant progress in all aspects of project implementation and consequently was brought out of its problem status during the JIR of April 2011.

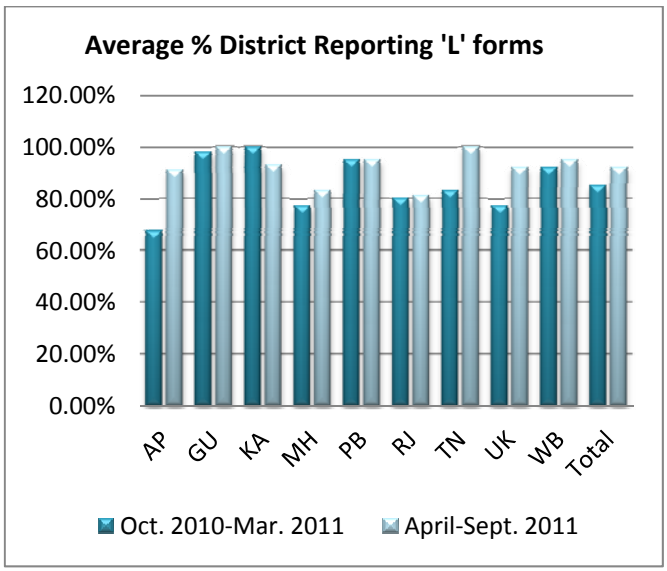
6. Subsequent to the discussions of the World Bank team with the CSU during the JIR of April 2011 regarding cancellation of unused Credit from the human health allocations, a request was received by the Bank from the MoHFW through the Department of Economic Affairs (DEA), Ministry of Finance on October 18, 2011 requesting cancellation of USD 15.954 million from the human health component and USD 0.324 million from the animal health component of IDSP, which is currently being processed. The letter was followed up with a request from DADF through the DEA vide letter of October 20, 2011 for an extension of the closing date of project (only for the avian influenza component) till September 30, 2012 so as to facilitate completion of the planned construction of two BSL III labs. The discussions with DADF on this request are detailed in Para 30 of the Aide Memoire. A decision on both the requests was taken in concurrence with DEA and the counterparts during the review of the risky and slow disbursing projects of December 02, 2011.

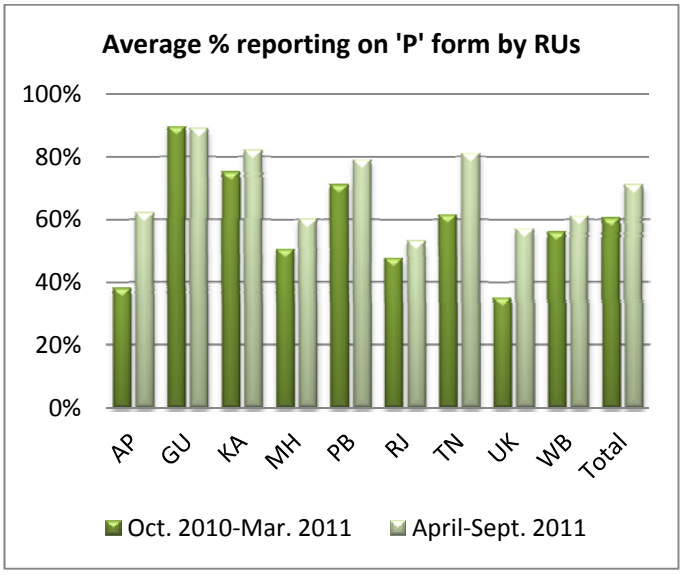
C. PROGRESS TOWARDS PROJECT DEVELOPMENT OBJECTIVES (PDO)

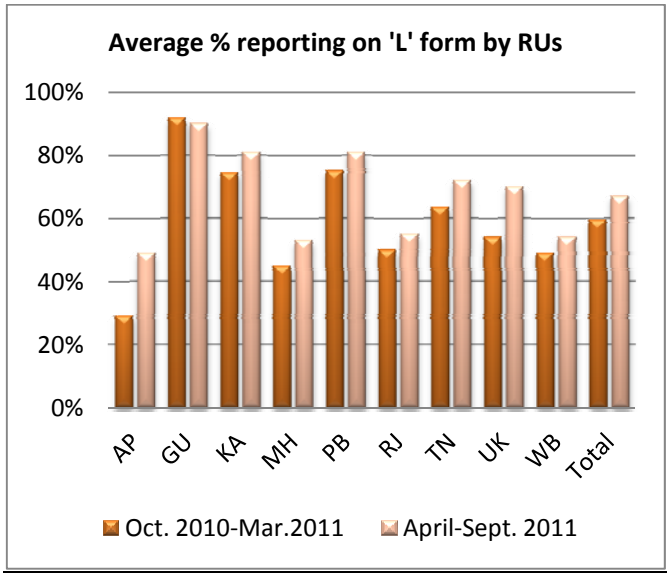
The revised Project Development Objective is to support Government of India (GoI) to strengthen the integrated disease surveillance system for epidemic prone diseases by (i) enhancing central level monitoring and coordination functions; and (ii) improving state/district surveillance and response capacity with emphasis on selected nine states. Additionally, the project will support GoI efforts to timely prepare for, detect and respond to the influenza outbreaks in humans and animals.

7. On an average almost 92% of districts are reporting through the portal in each week on 'P' and 'L' forms respectively for the reviewed period of April-September 2011 as against 91% of districts reporting on 'P' form and 88% of districts for 'L' form for the period October 2010-March 2011 reporting cycle. Andhra Pradesh showed the maximum improvement in the number of districts reporting on the 'P' as well as the 'L' form on the portal over the past three quarters. In terms of the number of designated Reporting Units (RUs) reporting on 'P' forms, there has been an encouraging trend, with the number of reporting units increasing by almost 25% for both Andhra Pradesh and Uttarakhand between Q4 of 2010 and Q3 of 2011. In terms of 'L' forms, Gujarat maintains in superlative position with 90% RUs reporting on the 'L' form, followed by Karnataka and Punjab at 81% for Q3 of 2011.









8. Data available on the IDSP portal as well as in the form of electronic communication from the nine priority states[3] indicates consistent improvement in performance of the PDO indicator *percentage of districts providing timely and consistent surveillance reports*. The construct of this indicator is quite

[3] Andhra Pradesh, Gujarat, Karnataka, Maharasthra, Punjab, Rajasthan, Tamil Nadu, Uttarakhand and West Bengal

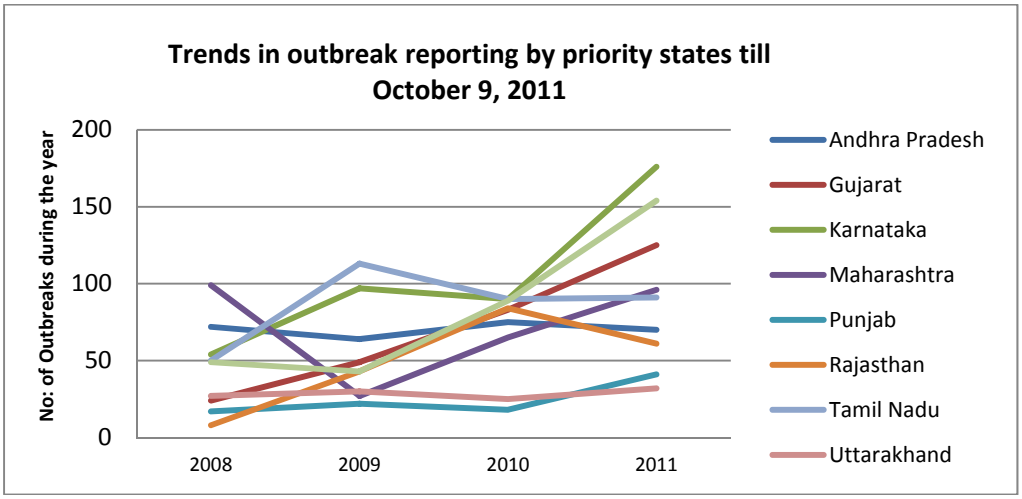
complex and involves timely and consistent reporting from Primary Health Centers (PHCs), Community Health Centers (CHCs), major hospitals (read sub-district and district hospitals) and private hospitals for the 'P' forms; and from labs within health facilities, district priority labs and labs within the referral lab network for the 'L' forms. Baseline data as of September 2009 was only available for 'P' forms reported from PHCs, while it was completely unavailable for the 'L' forms from any cadre of labs. Despite this ground reality, targets were pegged at a minimum of 80% reporting from PHCs and a minimum of 50% reporting from CHCs, major hospitals and private hospitals for the 'P' form with a cumulative reporting from 70% districts in the nine priority states; and 70% lab confirmation of outbreaks with at least 50% reporting on 'L' forms from all cadres of labs, with at least 75% of outbreaks in each of the nine priority states being adequately responded to. Eighteen months after project restructuring, data provided in the table below indicates steady progress on this complex and ambitious indicator, though the achieved level still remains short of the target envisaged.

Performance of PDO indicator: Percentage of districts providing surveillance reports timely and consistently in nine priority states

Target at project end (March 2012): 70% of the districts in nine priority states

Disaggregated indicator	Baseline (Sept. 30, 2009)	Target	April-Sept. 2010	Oct. 2010 - March 2011	Apr-Sept 2011
'P' form from PHCs	25%	80%	26%	33.5%	47%
'P' form from CHCs/Major hospitals	Not available	50%	18%	20.5%	37%
'P' form from private hospitals	Not available	50%	Not available	14%	14%
Lab confirmation for outbreaks	Not available	70%	9%	14%	19%
Reporting from District Priority labs	Not available	50%	Not available	59% (10/17 labs)	88% (15/17 labs)
Reporting from Referral Network Laboratories	Not available	50%	Not available	Not available	78% (7/9 States)

9. Information collated since 2008 till October 9, 2011 on the total number of outbreaks electronically reported by the nine priority states shows a sharply increasing curve. While the state of Gujarat increased reporting of outbreaks almost five times, reporting from the state of Rajasthan improved over eight times.



At the same time, an improvement is also demonstrated in the number of outbreaks which were lab assessed and confirmed.

	2008 n=400		2009 n=488		2010 n=619		Till Oct 9, 2011 n=846		Total n=2353
Activity	**Number**	**%**	**Number**	**%**	**Number**	**%**	**Number**	**%**	
No: of lab assessed outbreaks	122	31%	433	89%	430	69%	486	57%	1471
No: of lab confirmed outbreaks	90	23%	90	18%	85	14%	150	18%	415

10. Data on the PDO indicator *percentage of responses to disease specific outbreaks in nine priority states, assessed to be adequate as measured by three essential criteria, i.e. (i) timeliness of investigation (within 48 hours of first case information), (ii) adequate human samples being sent for lab confirmation within 4 days of outbreak, and (iii) availability of a final outbreak investigation report*, shows consistently improving trends against disaggregated criteria. However, taken cumulatively, the indicator shows dismal performance against the target of 75%. Here, it is essential to understand that not all human samples from outbreaks can be accessed for lab investigation (outbreaks of chicken pox have no lab test; food poisoning, ADD and viral fever are poorly amenable for lab diagnosis. This aspect has not been considered while designing the indicator nor while pegging the target. Also, the baseline data as of August 2010 accounts for only the first two essential criteria. The table below highlights the performance trends of this indicator.

Performance of PDO indicator: Percentage of responses to disease specific outbreaks assessed to be adequate as measured by three essential criteria in nine priority states

Target at project end (March 2012): At least 75% outbreaks in each of the nine priority states

Essential Criteria	October 2010-March 2011	April-September 2011
Investigation within 48 hours of first case information	80%	73%
Adequate samples sent for lab investigation	64%	63%
Availability of final outbreak investigation report	3%	5%

11. Over the life of the project, the diagnostic capacity in India for H5N1 and H1N1, in terms of the PDO indicator *functionality of diagnostic labs for human influenza and BSL III labs for animal influenza,* has improved significantly. While in September 2009, only seven diagnostic labs were available in the country for human influenza, with project support, an additional five labs have been established and a network of 12 human health labs is now operational. Since May 2009, a total of 35,181 samples have been tested by for H1N1 by these labs, of which 22.8% tested positive. For 2011 alone, a total of 4,643 samples were tested, of which 5% tested positive. On the animal health side, a network of 4 BSL-III labs has been established under the project.

12. Based on discussion above which details the consistently improving performance of the project, and despite the large ground to be covered for meeting the ambitious targets, which had been set in the absence of adequate baseline data, progress towards achievement of the development objectives continues to be rated Moderately Satisfactory.

D. OVERVIEW OF CURRENT IMPLEMENTATION STATUS

13. Monthly review meetings between the Bank Task Team and the CSU initiated post the review mission of April 2011 have continued and this proactive, coordinated supervision has yielded positive

results. The CSU has competitively recruited technical and management staff against 13 new and 6 existing vacant positions through walk-in interviews conducted in July 2011. Appointment letters were issued to 17 candidates and of these eight have assumed charge. At the state level recruitment of epidemiologists continues to be a challenge, especially in the states of Tamil Nadu and Karnataka. While Karnataka has completed the first phase of recruitment, Tamil Nadu is attempting to post regular medical officers against the sanctioned epidemiologist positions. Contracting of epidemiologists was not done in the state of Gujarat and Maharashtra since epidemiologists from regular health services were available to the project. Most recruited epidemiologists, microbiologists and entomologists have been provided customized training. The situation with respect to data managers and data entry operators is more encouraging.

Specialist	Sanctioned posts	% posted	% trained
Epidemiologist	231	42.8%*	95%
Microbiologist	26	77%	85%
Entomologist	9	78%	86%
Data Manager	234	89%	87%
Data Entry Operators	290	89%	79%

*An additional 35 epidemiologists are available in regular service in the states of Gujarat and Punjab.

Including these, the availability of epidemiologists improves to 58%

14. 111% of the expected training load for Training of Trainers (TOT) program and 98% of the load for the Field Epidemiology Training (FETP) program has been successfully addressed as of October 2011. Additional candidates recommended by states and candidates nominated for retraining were added to the training load, resulting in overachievement of training target. The CSU has been requested to track and provide data pertaining to the onward trainings conducted by the master trainers in the field. Additionally, induction trainings for all technical recruits were completed.

15. At present, the project is supporting strengthening of identified 17 District Priority Labs (DPL) in prioritized states; as well as supporting establishment of a referral lab network so as to promote access of all districts in priority states to diagnostic facilities for investigation of epidemic prone disease outbreaks. An annual grant of INR 2 lakhs has been released in quarterly installments to all labs for procurement of small equipment, consumables and reagents. 15 of the 17 DPLs are reporting actively on the 'L' form for tests defined for outbreak prone diseases, the defaulters being the District Hospital Lab, Ongole, Andhra Pradesh and the District Hospital Lab, Ajmer, Rajasthan. Since DPLs to date have been reporting through email, the CSU and DSUs will now focus energies to help them migrate to portal reporting. A national expert group has been constituted under the aegis of the MoHFW to provide technical support to the strengthening of DPLs. For the referral lab network, MOU and lab certification has been signed in all priority states. An annual grant of INR 2 lakhs with test based reimbursement for consumables, reagents with a maximum ceiling of INR 3 lakhs per annum has been disbursed to all labs except those in West Bengal. The referral lab network is functional in all states, save West Bengal, and quarterly reports on performance too are being submitted diligently. In the remaining five months to project closure, the lab network in West Bengal has to be operationalized; the External Quality Assurance Scheme (EQAS) initiated with at least one round of quality reviews undertaken in the priority states.

16. IDSP has established 441 data centers and training centers with the support of the National Informatics Center (NIC) in the nine priority states. Of these 97% of data centers and 93% of training centers are functional. The 182 training centers established with the support of the Indian Space Research Organization (ISRO) are dysfunctional on account of a satellite service disruption to the VSAT network. The data centers and training centers are being actively used in all states for data compilation, reporting and analysis. Between March-October 2011, a total of 160 inter- and intra-state video conferencing sessions were conducted. The dynamic IDSP portal is responding to internal and external customer needs and new features are being added to make communication of information seamless and efficient. There

has been a renewed emphasis for updation of master data with respect to RUs from individual states. A deadline of November end has been communicated to finalize the master data. In the remaining life of project, the project hopes to integrate Geographic Information System (GIS) interface with the portal for automated generation of maps representative of data. A visual representation of data has the potential of generating interest and easy assimilation of information to facilitate efficient responses. Moreover, portal data entry will be possible at the block level and the portal will add the capacity to integrate alerts sent through SMSs. The contract for the 24X7 IDSP call center was renewed for five months till project closure on similar terms. Since its operations in February 2008, till October 20, 2011, a total of 2,58,824 calls have been received by the call center of which 14% pertained to swine flu alerts. The procurement process for the much innovative Strategic Health Operations Center (SHOC) is in advanced stages. The project is targeting award of contract by November, 2011 with complete operationalization of the center by January, 2012.

17. Eleven of the twelve planned labs for testing of human samples for H5N1 and H1N1 are functional as of date. Necessary reagents and materials have been provided to all labs. Training has been provided in March 2011, reporting formats have been shared and three sentinel sites per lab too have been finalized for influenza testing. Since January 2011, four outbreaks of H5N1 have been reported amongst poultry in India, and no human case of H5N1 has been reported. In case of H1N1, till October 23, 2011, a cumulative total of 48,344 human cases have been reported in India with 2796 fatalities. Between 2009 and October 2011, a total of 90,179 human samples were tested for H1N1 at the 11 supported labs; of these, 18,558 samples were tested positive. Since May 2009, a total of 35,181 samples have been tested for H1N1 by NCDC of which 22.8% tested positive. For 2011 alone, a total of 4643 samples were tested, of which 5% tested positive. The procurement of some high value reagents for labs testing H5N1 and H1N1 is stalled for want of clearances from procurement cell of MoHFW. This needs to be addressed on priority since the labs can potentially run out of these reagents in the near term, stalling influenza testing.

18. For the animal health component, as of 15th November 2011, the project has a balance amount of about Rs. 89 crores [net of direct payments made to UNOPS on behalf of DADF]. Of this, construction of two BSL3 labs was to utilize about Rs. 70 crores, and Rs. 20 crores is likely to be reimbursed against the decentralized expenditure undertaken in different states. The remaining amount can be adjusted against the price contingency. The audit report for the decentralized expenditure is likely to be submitted to the World Bank by 15th December 2011.

19. *BSL III labs:* The Project was supposed to install four prefabricated (prefab) BSL3 and two constructed BSL3 Labs in six regional laboratory areas. The installation of the four prefab BSL3 laboratories has been successfully undertaken in Jalandhar, Kolkata, Bareilly and Bangalore. While more than 30,000 samples are already analyzed in Jalandhar and Kolkata, the BSL3 laboratory in Bangalore and Bareilly is expected to be operational by 30th November 2011. All formalities pertaining to the operationalization of Bangalore and Bareilly laboratories are on track and the Bank task team appreciated the efforts of Regional Laboratory colleagues for the timely installation of the BSL3 labs.

20. *Hiring Technical Consultants for Designing/Supervising the Constructed BSL-III Labs:* The project was supposed to establish two constructed BSL-3 Labs at Pune and Guwahati which is yet to be grounded. Mission was not convinced of the reasons stated for the delay in following the procurement procedure as several other bottlenecks were also observed. The procurement process has recently started and the EoI was announced on October 22, 2011. BSL3 lab is a highly sophisticated lab with high bio-security measures. DADF has already hired technical consultants (through Procurement agency – UNOPS) to design and supervise the construction of the two BSL3 labs. However, there are a few concerns that were raised during the field visit to Pune and Guwahati; (1) Forest clearance for proposed site of construction is yet to be received at Pune, (2) pollution control board clearance for both sites at

Pune and Guwahati are yet to be received, (3) demolition permission for a old building in the proposed site is yet to be given at Guwahati, and (4) Municipal Corporation Clearance for both Pune and Guwahati are yet to be received. In addition, the procurement of these two BSL-3 labs is following ICB procedure, which is time consuming. In view of this, DADF has shared with the Bank a detailed work plan for completion of this activity before September 30, 2011. The Task Team has reviewed the work plan and is of the opinion that in view of the fact that ICB procurement process is required to be followed to initiate the construction process, internal clearances from various departments within the Government of Assam and Maharashtra are still pending, combined with the limited capacity of DADF and the time required for the various internal financial processes in DADF, the project may not complete the procurement and installation of the pending two constructed BSL3 labs even in the proposed six-month extension period.

21. The mission recommends that the technicians from all 6 BSL3 animal labs be provided with exposure training to international standards of bio-safety and occupational safety practices. The provision of adequate supply of Personal Protective Equipment (PPE) and anti-viral drugs should be consistently managed and monitored. Maintenance cost of prefabricated BSL3 labs is extremely high and essential for the continued effectiveness of these labs. The mission recommends that DADF should explore the possibility of establishing an Operations and Maintenance contract be issued for 4-5 years.

Procurement, Financial Management and Disbursements

22. *Procurement- Human Health:* Progress with procurement for the human health component is as per table below:

Procurement Method	No: of Items	Status
Direct Contracting	6	- 4 items (kits and consumables) valued at INR 54 lakhs completed - 2 items valued at INR 153 lakhs being high value being procured through the Procurement Cell, MoHFW and pending
NS	22 (17 packages)	- Procurement of 4 items upgraded to NCB method - Purchase Order issued for 15 items valued at INR 83.96 lakhs - Recommendations from purchase committee awaited for 2 items - Despite third round of shopping, less than three quotations received for 1 items
NCB	8 items (4 as per approved procurement plan and 4 upgraded NS items)	- Commercial evaluation underway - Bids for procurement of -20 degree Centigrade refrigerators are to be re-invited as no responsive bids were received

Procurement of SHOC was initiated through NCB in September 2011. The Bid Evaluation was completed within the stipulated time and the Bid Evaluation Report (BER) has been cleared by the Bank. The services contract for 24X7 Call Centre that was due to expire on October 31, 2011 is extended till March 31, 2012. The Procurement Post Review (PPR) for 2011 will be conducted in Tamil Nadu during the week starting December 19, 2011 and at IDSP, Delhi during December 26-27, 2011.

23. *Procurement- Animal Health:* Three of the four prefabricated BSL III labs are supplied and installed with the fourth awaiting electrical connectivity. The Avian Influenza kits have been procured using ICB methodology for years 2009 and 2010. Shopping contracts for disposable syringes, serum vials and deep freezers have been awarded with the supplies completed. A design and supervision consultant has been recruited for construction of two BSL III labs in Pune and Guwahati.

24. *Disbursement and Financial Management:* Against the amended allocation of SDR 41.478 million, the disbursement as on 8-November 2011 stands at SDR 17.447 million [at 42.06%]. The undisbursed balance of USD 42.70 million includes the unadjusted advance of USD 5.3 million. Part cancellation of USD 15.954 million under the human health component is under process. At current rates of exchange, the undisbursed Credit will allow disbursements of approx. ₹146 crores in the remaining life of the project.

25. Staffing of the financial management function at both NCDC and DADF is complete and a visible improvement in the quality of financial management arrangements has been noted. The improvements are reflected in the timeliness of submission of audit reports, quality of the interim financial reports etc. and on the overall in the proactive actions taken to resolve the pending FM issues. However there still remain several opportunities to strengthen the financial management performance, especially with respect to the quality of monitoring of financial management progress at the state and district units, tracking of fund releases to various institutions, settlement of advances to UNOPS etc. Submission of Audit reports for FY10-11 are now overdue for the states of Gujarat, Rajasthan, West Bengal and CSU, and DADF [for Animal Health Component]. For these reasons, the FM performance is being rated as 'Moderately Satisfactory'.

Status of Legal Covenants

26. All legal covenants are in compliance.

Safeguards

27. Post restructuring, the states Gujarat, Maharashtra, Karnataka, Andhra Pradesh and Orissa had expressed interest in implementation of the Tribal Action Plan (TAP) in selected blocks/districts. Gujarat and Maharashtra have documented their achievements in implementing the community surveillance pilot, Orissa continues to implement its TAP in Koraput district, while Karnataka has not provided an update on the community surveillance initiatives piloted in the Gundulpet and Kollegal blocks in Chamrajnagar district. The Mission reviewed community surveillance in Maharashtra and Gujarat during the mission and has documented its findings in Annex 6 and 8.

28. With the support of WHO, NCDC has revised the Laboratory Guidance manual on bio-safety and infection control and is continuing capacity building activities through training sessions, which include issues related to bio-safety, safe handling of infectious material and quality assurance. However, given some of the sub-optimal practices in labs, including poor waste segregation, the Bank and WHO feel that it is critical that CSU make a concentrated effort to physically disseminate the bio-safety guidelines, post awareness materials in all laboratories and ensure training is supported by systems for regular on-site training and supervision. Additionally, the mission would again like to reiterate the importance of mandating regular vaccination of laboratory technicians to protect them for blood-borne hepatitis.

29. In line with the sustained progress achieved by both the human health and animal health components of the project since the last JIR, the overall Implementation Progress merits the continued rating of Moderately Satisfactory.

Key Implementation Issues and Next Steps

30. *Extension of DADF component by 6 months till September 30, 2012:* A decision was taken by the Bank in concurrence with DEA and DADF during the review of risky and slow disbursing projects of December 02, 2012, that IDSP will close as per schedule on March 31, 2011.

31. *Construction of remaining two BSL III labs:* In view of the limited progress made by DADF since the project restructuring of March 2010 on construction of the pending two BSL III labs, the pending site clearances from various departments of the state Government of Assam and Maharashtra, the time-consuming internal financial processes of DADF and the time required for the International Competitive Bidding proposed for procurement of this activity and the limited capacity of DADF; the Bank is of the opinion that the proposed labs are not likely to completed within the proposed extension period until September 30, 2012. The Bank with the concurrence of DEA and DADF took a decision during the afore-mentioned review of risky and slow disbursing projects that the procurement of pending two constructed BSL III labs will be dropped from the procurement plan of DADF. The dropping of this activity from the Bank approved procurement plan for 2011-12 for the animal health component of IDSP will entail additional savings in the animal health component.

32. *Cancellation of Credit:* Subsequent to the request from DEA for cancellation of Credit of USD 16.278 million (USD 15.954 million from the human health component and USD 0.324 million from the animal health component), the Bank Task Team is working closely with the National Center for Disease Control on the category-wise reallocation of Credit for the human health component and will, thereafter, proceed with the cancellation of the suggested amount of USD 15.954 million from the human health component of the IDA Credit allocation. In view of the dropping of construction of BSL III labs at Guwahati and Pune from the approved procurement plan of 2010-11 for the animal health component, additional unspent Credit is envisaged. DADF is encourage to identify the total quantum of unspent Credit and request cancellation which the Bank team will then process with alacrity

33. *Improving Portal Reporting:* A renewed focus on non-reporting districts and irregularly reporting districts at the CSU and SSU levels will ensure that the performance of the project in terms of timely and consistent reporting by districts improves further. Updation of the master data to correctly reflect the reporting units, continued focus on reporting by major hospitals, and improving lab reporting through the portal will also be areas for close monitoring. Increasing the final outbreak reporting will be yet another area for focus at this stage. All these actions will also improve the performance of the project towards the PDOs.

34. *Completion of Planned Procurement under the Human Health component:* The planned procurement activities, including the SHOC, will need to be closely monitored and expedited at each stage to be able to complete the activities within the project period. The procurement of high-value consumables for the Influenza lab network may particularly need attention as the supplies to the influenza lab network may be severely affected by any further delay.

Timing of Next Mission

35. Strengthening of the Integrated Disease Surveillance System has been identified as a priority within the Project Implementation Plan of the National Rural Health Mission II. In line with this thinking, the Bank proposes a learning Implementation Completion Review (ICR), for which, the ICR author will hold discussions with the IDSP team and undertake field visits in December 2011-January 2012. This will be followed by the completion and ICR mission in March 2012.

ANNEX 1

BENCHMARKS AGREED DURING THE JIR

No.	Action	By whom	By when
1	Masterdata from all districts of nine priority states updated in portal	SSUs and CSU	December 15, 2011
4	Contract awarded for SHOC	CSU	November 30, 2011
5	AMC for ISRO equipment to be initiated on prospective basis	CSU	As soon as EDUSAT becomes functional
6	Never reporting on portal districts from nine priority states to be reduced by half	SSUs with follow up from CSU	December 15, 2011
7	Districts irregularly reporting in nine priority states to be reduced by half	SSUs with follow up from CSU	December 31, 2011
8	All 17 DPLs to migrate to Portal reporting	SSUs with support from CSU	January 1, 2012
9	Workshop of nodal officers from 65 referral labs conducted at NCDC	CSU	December 31, 2011
10	First round of EQAS completed in all referral labs and functioning District Priority Labs	CSU	January 31, 2012
11	Finalize compilation of the document on disease patterns among tribal communities prepared earlier by the CSU	CSU	January 31, 2012
12	Compile state specific IEC and community surveillance plan and activities.	CSU	January 31, 2012
13	State wise list of technical and IT personnel trained by the project since 2011 updated on the portal with contact details	CSU	December 31, 2011
14	Analytical report of field visits by CSU team to training institutes shared with them	CSU	Ongoing
15	Batch wise training load and expenditure incurred shared with the Bank	CSU	December 31, 2011
16	Orientation to IDSP for KC General Hospital staff and regular reporting mechanism established at ICH, Bangalore	SSU, Karnataka	January 31, 2012
Financial Management Action Points for DADF			
17	Submit the Annual Audit Report for FY10-11 for DADF	DADF	Immediately
18	Submit audit reports for FY07-08 decentralized expenditures at RDDL	DADF	Immediately
19	Finalization of IUFR for the period of 01-April-2011 to 30-Sep-2011 and subsequent submission of reimbursement claim to CAAA – excess claims made by DADF to be adjusted	DADF	November 30, 2011
Financial Management Action Points for CSU			
20	Submit the Annual Audit Reports for FY10-11 for the states of Gujarat, Rajasthan, and West Bengal.	CSU	Immediately
21	Submit the missing documentation with respect to the	CSU	Immediately

	Annual Audit Report FY10-11 for the states of Andhra Pradesh, Maharashtra, Punjab, Uttarakhand, Tamil Nadu and CSU, NCDC.		
22	Finalization of IUFR for the period of 01-April-2011 to 30-Sep-2011 and subsequent submission of reimbursement claim to CAAA.	CSU	November 30, 2011
23	Submit reconciliation of audited expenditure with the expenditure reimbursed by the Bank for FY10-11	CSU	January 31, 2012
24	Training of FM consultants and SSOs at CSU	CSU/WB	January 31, 2012

ANNEX 2

STATUS OF ACTIONS AGREED DURING LAST JIR OF APRIL 2011

	Action	By whom	By when	Update
1	Follow up with NRHM and MOHFW to ensure that the HR at state and central level, routine operating expenses and equipment maintenance is included in the PIP of the 12th plan and the MOHFW budget for 2012-13.	CSU and SSU	Ongoing	All activities being undertaken under IDSP (including human resources) are proposed to continue as 'Disease Surveillance and Response Program' under NCDC in next Five-Year Plan as a Central Sector Scheme.
2	Provide data manager training for AP and WB	CSU	June 9-10, 2011	Trained on June 9th -10th, 2011
3	Provide update on AMC contract of IT equipment	CSU	May 30, 2011	AMC for NIC supported equipment of training centers and data centers has been decentralized to States. Letter from Director (PH), MOHFW has been sent to all Mission Directors, NRHM on 15.7.2011. For ISRO equipment, project had discussions with ISRO in Bangalore in May 2011 where ISRO had committed for negotiating with vendor for AMC on prospective basis once EDUSAT becomes functional which is likely to be in Nov. 2011
4	Provide the bank an update on the number and trends of health events that were identified through the media scanning and verification cell	CSU	May 15, 2011	Media Scanning & Verification Cell (MSVC) has identified a total of 1603 health related media alerts during (July 2008 to Sept. 2011); MSVC reported 423 alerts in 2010 & 270 alerts in 2011 till September. Data periodically shared with World Bank.
5	Prepare and share the technical specifications of the SHOC with the Bank for Non objection	CSU	May 15, 2011	Completed.
6	Introduce the use of competency assessment and review tool for all outbreak reports	CSU	Immediately	Use of the assessment and review tool for all outbreak reports has been initiated at CSU. SSUs have been requested to initiate the same at State/district level.
7	Organize workshop with 65 participating labs from laboratory network in 9 states	CSU	August 15, 2011	Delayed workshop of nodal officers of 65 referral labs & State microbiologists of all States will be held in November 2011.
8	Organize a workshop of experts to develop updated guidelines related to the use of Typhidot, Tube Widal and Blood culture	CSU with support from	June 30, 2011	National expert group formed with approval of MOHFW and meeting held in October 2011. The expert

	tests for Typhoid surveillance.	WHO		group suggested that Blood culture for typhoid should be done in place of Typhidot and WIDAL test.
9	Final report of laboratory assessment shared with the Bank	CSU	June 30, 2011	Post procurement audit report for equipments supplied to Phase-1 states under IDSP has been submitted by the hired consultant M/s Technomed Services. A meeting was held to address deficiencies in report, following which, HSCC has submitted the Consignee receipt certificates (CRCs) of the equipment not found on site. CSU is following up with the States on the updated status of these equipment.
10	Revised lab manual to be uploaded on the portal and printed	CSU	July 15, 2011	Lab manual uploaded on the portal on June 3, 2011. Currently under publication.
11	Provide training for the 10 untrained microbiologists	CSU	June 30, 2011	Trained on June 13th -18th, 2011.
12	(i) Follow up with AP and TN for signing of MOU and release of funds to referral labs (ii) Follow up with WB for signing of MOU and release of funds to referral labs	CSU	(i) June 30, 2011 (ii) July 31, 2011	Andhra Pradesh, Tamil Nadu and West Bengal signed MoU. Release of funds is pending for West Bengal.
13	CSU to closely monitor and document the final reports on outbreaks from the states	CSU	Ongoing	Letters to states have been sent for the same. Some of States have started sending final reports.
14	Community surveillance initiatives from Karnataka and Maharashtra to be reported	SSOs of these states	August 15, 2011	Gujarat has submitted the report on Community surveillance in Tapi district. Central Surveillance Unit is following up with Maharashtra.
15	Numbering system for Unique ID to be assigned to each outbreak by states to be introduced and guidelines to be issued by the CSU for the same	CSU	May 31, 2011	Completed on August 10, 2011.
16	Changes in portal reports so that DSO can review which RUs have reported and which RUs are consistent	CSU	May 31, 2011	Completed on May 3, 2011.
17	Portal to include automated message if non-supported browser is being used	CSU	May 31, 2011	Completed on May 2, 2011.
Procurement				
18	Submission of draft NCB document for 1st NCB procurement to the Bank	CSU	May 15, 2011	National Shopping (NS)- Of the 17 packages (22 items) for procurement of reagents, equipment and printing of materials, the current status of procurement is as follows: • 4 items- procurement method upgraded to NCB as per World Bank comments (see status below)
19	Providing Comments and No Objection to draft NCB document for 1st NCB procurement	Bank	May 18, 2011	
20	Publication of IFB for all NCB procurements	CSU	June 06, 2011	
21	Issue of NOA / Purchase Orders for all shopping procurements for Equipment, Kits and Consumables	CSU	June 15, 2011	

				• 15 items - purchase orders issued for (CO2 incubator, deep freezer, micro-centrifuge, one step PCR, printing of manuals, Tc glassware washing system, water purifier, lab refrigerator, micropipettes, high precision micropipettes, gel doc system). • 2 items- Recommendation of purchase committee awaited. • 1 item – Despite 3rd round of shopping, less than 3 quotations received. NCB - Advertisement for 6 equipments & 2 reagents published in newspapers on 21.8.2011 and uploaded on NCDC/IDSP website (4 items as per approved procurement plan and 4 upgraded from NS as stated above). Tender opened on 22.9.2011. Technical evaluation of the bids done. Commercial evaluation under process. Direct contracting (Single source) – • 4 items procurement complete and reagents delivered • 2 items being high value being procured by Procurement cell, MoHFW
Financial Management Action Points for DADF				
24	Submit the replies to review letter issued by the Bank on November 8, 2010.	DADF	April 30, 2011	Pending
25	Submit a reimbursement claim for 2009-10 amounting to INR569,056 based on the review of audit reports for the year.	DADF	April 30, 2011	Completed
26	Submit a reimbursement claim for 2010-11 (April to May) INR 1,884,739 based on the review of the IUFR.	DADF	April 30, 2011	Completed
27	Finalize the appointment of auditors as per Bank procurement procedures, for auditing the decentralized expenditures for 2008-09 and 2009-10 pertaining to DADF trainings as agreed with the Bank on 23 March 2010.	DADF	June 30, 2011	Completed
28	As per the Financing Agreement, submit the FMR on eligible expenditures incurred by DADF on the project at the central level during October 2010 – March 2011.	DADF	May 15, 2011	Completed

Financial Management Action Points for CSU				
29	Submit the replies to the three audit review letters issued by the Bank against the audits for FY 2009-10.	CSU	May 15, 2011	Submitted
30	Submit reconciliation of audited expenditure with the expenditure reimbursed by the Bank for the year 2009-10.	CSU	May 10, 2011	Completed
31	To follow up with Kashmir state with regard to the submission of the consolidated state's audit report for FY 2009-10.	CSU	Immediately	Submitted to World Bank.
32	Finalization of IUFR for the period of 01-Apr-2010 to 30-Sep-2010 and subsequent submission of reimbursement claim to CAAA.	CSU	May 15, 2011	Reimbursement claim filed with CAAA for INR 41.596 million on June 20, 2011 and for INR 99.11 million on September 13, 2011.

ANNEX 3

RESULTS FRAMEWORK: UPDATED INDICATORS:

<table>
<tr><th>PDO Indicators</th><th>Baseline (Sept 30, 2009)</th><th>August 2010</th><th>March 2011</th><th>Target (March 2012)</th></tr>
<tr>
<td>% of districts providing surveillance reports timely and consistently in 9 priority states</td>
<td><u>25% of Priority state districts</u>*

*<u>based on PHC data only</u></td>
<td>27%
(Note: indicator value needs to be refined. With current information available, the major hospital and private data not yet available)</td>
<td>
<table>
<tr><th></th><th></th><th></th><th colspan="3">Performance</th></tr>
<tr><th>Disaggregated indicator</th><th>Baseline at restructuring</th><th>Disaggregated Target</th><th>April-Sept. 2010</th><th>Oct. 2010 - March 2011</th><th>April-Sept. 2011</th></tr>
<tr><td>‘P’ form from PHCs</td><td>25%</td><td>80%</td><td>26%</td><td>33.5%</td><td>47%</td></tr>
<tr><td>‘P’ form from CHCs/Major hospitals</td><td>Not available</td><td>50%</td><td>18%</td><td>20.5%</td><td>37%</td></tr>
<tr><td>Lab confirmation for outbreaks</td><td>Not available</td><td>70%</td><td>9%</td><td>14%</td><td>19%</td></tr>
<tr><td>Reporting from District Priority labs</td><td>Not available</td><td>50%</td><td>Not available</td><td>59% (10/17 labs)</td><td>88% (15/17 labs)</td></tr>
<tr><td>Reporting from Referral Network Laboratories</td><td>Not available</td><td>50%</td><td>Not available</td><td>Not available</td><td>78% (7/9 labs)</td></tr>
</table>
Overall average of 92% districts reporting on both ‘P’ and ‘L’form.
</td>
<td>70 % of the districts in priority 9 states,</td>
</tr>
<tr>
<td>% of responses to disease specific outbreaks assessed to be adequate as measured by 3 essential criteria in 9 priority states ^</td>
<td><u>over all 45% of outbreaks</u>
Range : T& K-66; UK, WB, M-50%;</td>
<td>[68%]
(Note: indicator value needs to be refined. With available inform-ation, the 3rd criteria of</td>
<td>
<table>
<tr><th>ESSENTIAL CRITERIA</th><th>% of response to disease specific outbreaks</th></tr>
<tr><td>Investigation within 48 hours of first case information</td><td>– 73% (April-September 2011
– 80% (Sept. 2010-March 2011)</td></tr>
</table>
</td>
<td>At least 75% outbreaks in each of the 9 states</td>
</tr>
</table>

<table>
<tr>
<td></td>
<td>AP-20% ; R-10%; P-0%</td>
<td>final report is not yet taken into consideration)</td>
<td>
<table>
<tr><td>Adequate samples sent for lab investigation within 4 days</td><td>– 63% (April –Sept. 2011)
– 53 % (Jan - March 2011) *
– 75 % (Oct - Dec 2010)</td></tr>
<tr><td>Availability of final outbreak investigation report</td><td>– 5% (April-Sept. 2011)
– 2 % (Jan - March 2011)
– 4 % (Oct - Dec 2010)</td></tr>
</table>
* In 2010 (Oct-Dec), 62% outbreaks were due to Acute Diarrhoeal Diseases and Food poisoning; and only 7% due to Measles and Chicken pox. In 2011 (Jan-Mar), 52% outbreaks were ADD and Food poisoning; while 27% were due to Measles and Chicken pox where usually diagnosis is based on clinical features.
</td>
<td></td>
</tr>
<tr>
<td>Improved diagnostic capacity for H5N1 and H1N1 as measured by:
Number of functional diagnostic laboratories for human influenza established
Number of functional BSL3 laboratories for animal influenza established</td>
<td>7/12
2/6</td>
<td>10
2/6</td>
<td>(i) 11 diagnostic labs for H5N1 and H1N1 for human health functional
(ii) 2/6</td>
<td>(i) 12
(ii) 6</td>
</tr>
</table>

* ***<u>Timely & consistently</u>****= Within one week after the last date of every reporting week for at least 40 weeks* ***(80% of week at any given time)*** *each year. Reports should have desegregated collated forms of P {i. PHCs, ii Other Govt. Hospitals and iii) Private hospitals separately}, L (PHC labs, district Public Health lab and referral laboratories) and S reporting units.*

^= *The three essential criteria of outbreak investigations are i) Timeliness of investigation i.e. within48 hours of first case information (FIR) ii) adequate human samples were sent for laboratory confirmation early in the outbreak (within 4 days) and iii) Availability of a final outbreak investigation report.*

@= i. A district with a minimum of 80% of reporting from primary health care institutions and ii a minimum of 50% reporting from hospitals with OPD and inpatients surveillance; iii) laboratory confirmation of at least 70 % of outbreaks and at least 50% district priority labs and referral laboratories network reporting regularly

<table>
<tr><th>No</th><th>Outcome Indicators by Components</th><th>Baseline as of 30/9/09</th><th>August 2010</th><th>March 2011</th><th>Sept. 2011</th><th>Target for 31/3/2012</th><th>Comments</th></tr>
<tr><td>1</td><td colspan="5">Component 1: Central Surveillance Monitoring and Oversight</td><td></td><td></td></tr>
<tr><td>i.</td><td>Induction training completed Epidemiologists /Microbiologists and Entomologists in position</td><td>40%</td><td>22% of sanctioned positions are filled with trained staff</td><td>29% of sanctioned technical staff in position have completed induction training.</td><td>93% (119/128) of technical staff in position have completed induction training</td><td>90%</td><td><table><tr><th></th><th># sanctioned</th><th># in position</th><th># trained</th></tr><tr><td>Epid.</td><td>231</td><td>102</td><td>96</td></tr><tr><td>Micro.</td><td>26</td><td>19</td><td>17</td></tr><tr><td>Ento.</td><td>9</td><td>7</td><td>6</td></tr><tr><td>Total</td><td>266</td><td>128</td><td>119</td></tr></table></td></tr>
<tr><td>ii.</td><td>Number of quarterly review meetings of Priority states</td><td>quarterly</td><td>1</td><td>3 (total till date)</td><td>2 (total 5 till date)</td><td>8 meetings in 2 Years</td><td>Meeting with SSOs was organized during Apr. 2011, July 2011 and in Oct-Nov 2011.</td></tr>
<tr><td>iii.</td><td>Number of on site visit for supportive supervision, for states by CSU</td><td>2/state/year</td><td>8 visits in total</td><td>19 visits in total</td><td>25 visits during Jan.-Oct. 2011</td><td>4/state/year</td><td>No. of times states visited during Jan-Oct 2011: Andhra Pradesh – 2; Gujarat – 3; Karnataka – 2; Maharashtra – 1; Punjab – 5; Rajasthan – 4; Tamil Nadu – 1; Uttarakhand – 3; West Bengal – 4</td></tr>
<tr><td>iv.</td><td>Number of videoconferences held to give feedback on outbreak response assessed using the tool</td><td>NA</td><td>10</td><td>12</td><td>Total 160 VC sessions conducted during March-Oct. 2011</td><td>Once every month</td><td>EDUSAT was not functional since mid-September 2010. Moreover, the Inter-wise application was being upgraded by NIC from Dec. 2010 till Feb. 2011. IDSP started conducting VC sessions via Inter-wise application over Broadband since March 15, 2011.</td></tr>
</table>

v.	SHOC functional and being used	Nil	Not started	Not started	Procurement processes underway	At least one outbreak investigation review per month in 2012	▪ Advertisement for Invitation for Bids (IFB) published on 14.08.2011 ▪ Pre-bid meeting held on 30th Aug2011. Bids opened on 16th Sept2011 and Techno-commercial bid evaluation committee formed on 29th Sept 2011. ▪ Meeting of Techno-commercial bid evaluation meeting held in Oct. 2011. ▪ Bid evaluation done and report shared with WB on 25.10.2011.
vi.	Number of referral lab network & district labs established	4 Network negotiated	District labs: 6 Referral lab network: rolled out in Rajasthan and Gujarat	District Priority labs: 13 labs reporting L-forms Referral lab network rolled out in 5 States (Gujarat, Punjab, Uttarakhand, Karnataka, Rajasthan).	DPL: 15 labs reporting 'L' forms Referral lab network functional in 8 states (except WB); quarterly report received from 7 states	One networks & 1 dist lab in each of 9 states.	• Procurement of the equipment completed in 9 states • Microbiologist posted at SSU in 7 states (except GJ & MH) • Microbiologist posted in 17 labs (2 in Andhra Pradesh, 2 in Gujarat*, 2 in West Bengal, 2 in Uttarakhand, 2 in Karnataka*, 1 in Punjab, 2 in Maharashtra, 2 in Rajasthan, 2 in Tamil Nadu) **Microbiologist posted by State govt.* • 15 district labs reporting to CSU by e-mail: (except 2 in West Bengal, 1 in Rajasthan and 1 in Maharashtra) • Funds disbursed to referral lab in 8 states • Quarterly reports submitted by 7 states(except Andhra Pradesh & West Bengal)
vii.	Number of referral and district labs who underwent EQAS		Not due	Not due	Not due	1 EQAS/ lab/in 2011-12.	EQAS organizer being identified.

viii.	% of districts with IT network for on portal data entry, videoconferencing and inter-voice connection between states & have access to toll free 1075	Portal =40% VCF =50% TFA= 25%	% of districts with Portal data entry = 77 % of districts utilizing VC facility (April to August 2010) = 21 % of districts having Toll free no.1075 connectivity = 95	% of districts with Portal data entry = 91% % of districts utilizing VC facility (since Sept 2010) = 0 * % of districts having Toll free no.1075 connectivity = 95%	% of districts entering data on portal: 92% % of districts having VC facility: 95% % of districts having Toll free 1075 connectivity: 95%	80% for all 3 facilities throughout the year	EDUSAT is not functional since Sept. 2010. IDSP has started conducting VC sessions via Inter-wise application over Broadband since March 15, 2011. Of the 776 districts IT linked to the SSU/CSU, 757 districts (except districts of West Bengal) are having the facility to conduct VC (status as in Sept 2011).
2	**Component 2: Improving state/district surveillance and response capacity**						
ix.	% of districts IT linked to the SSU/ CSU	<50%	92%	97%	97%	90%	97% (776) data centre sites are IT linked to the SSU/ CSU 93% (745) training centre sites are IT linked to the SSU/ CSU
x.	No. of states providing feedback monthly to the districts	5/9 states	All states provide feedback to the districts on a regular basis, as well as whenever an issue arises.	9/9	9/9	9/9	All states provide feedback to the districts on a monthly basis, as well as whenever an issue arises.
xi.	% of responses to disease specific triggers assessed to be adequate by SSU	5 0-66%	Tool for Adequate assessment not yet used	Tool for Adequate assessment not yet used by SSU	Tool for adequate assessment not yet used by SSU	>80%	Using 3 essential criteria of outbreak investigations monitoring done by CSU. For the period April-Sept 2011: ▪ Investigation within 48 hours of first case information: 73% ▪ Appropriate samples sent for lab investigation: 63 %

							▪ Availability of final outbreak investigation report: 5 %
xii.	% of major hospitals enrolled doing IP , OP & Lab Surveillance , and sharing P & L forms	<20%	44% for P form (hospital) 22% for L form (lab)	Average for P form: 60% Average for L form: 59%	Average for 'P' form: 60% Average for 'L' form: 65%	50%	
xiii.	% of blocks in which at least 1 private provider shares weekly to surveillance reports	<20%	N.A.	Pvt. unit reporting: P form: N/A L form: N/A		60%	Reporting unit and actual reporting by Blocks not readily available.
xiv.	CBS established and % villages reporting to Call Center No **1075** or nearest PHC	Nil	N.A.	CBS established in 2 Blocks of Tapi district, Gujarat		50% villages in Pilot blocks	Output not yet available.
3	**Component 3: Influenza surveillance and response**						
xv.	Number of sentinel hospitals with routine surveillance for human influenza	Nil	4	4	3 sites identified per lab	10	
xvi.	Epidemiological survey to detect causes and spread of HPAI outbreak	Nil	Process started	Random samples are regularly taken from both potential risk areas as well as from areas that are not at risks	Samples are regularly collected from potential risk areas and also non-risk areas and evaluated in prefab BSL III labs and in BSL II labs of the		Continuing as plan

					government		
xvii.	National surveillance system with adequate coverage	Not in place	Completed in two Regional laboratory areas	About 600, 000 + sample are analyzed in all 6 BSL -3 lab states	A cumulative of 90,000+ samples analyzed in government and project supported labs	The total number of sample analyzed in BSL-2 and BSL-3 are likely to exceed more than 30,000 samples/year	Continuing as per plan
xviii	Lead time for availability of diagnostic results significantly reduced	Nil	Completed in two Regional laboratory areas	Results are share within 2-3 days time depending on the distance of the areas where sample are collected	Maximum time taken by the main referral lab in Bhopal is 3-4 days. Samples are analyzed in other labs within 2-3 days	Areas nearer to BSL-3 laboratory are getting the result within 24 -30 hours	
xix.	Emergency supplies available at strategic field locations	Limited	Adequate supply available at all 612 districts	Adequate field test kits are available	Adequate field test kits are available	Adequate supplies of PPE kits and disinfectants	
xx.	Regular meetings between health officials and animal husbandry officials	Regular	Process Already started	Mission is unable to assess this during this mission	Monthly/bi-montlhy meetings are called in at-risk states by the Additional Chief	Regular (at least one/6 months)	

					Secretary and the Principal Health Secretary inviting all other line department secretaries		

ANNEX 4

IMPLEMENTATION PROGRESS

Human Resource & Capacity Building

IDSP supports technical staff including epidemiologists, microbiologists, entomologists and IT cadres of data managers and data entry operators for District, State and the Central Surveillance Units in the nine priority states. In addition, the project also supports financial consultants for states, administrative staff and a few specialist cadres at the CSU. While staff costs are supported only in the priority states, training of all cadres of staff across the country is being supported by the project.

Progress: Since the last mission the HR capacity of the CSU has been strengthened with recruitment of technical and non-technical personnel. In July 2001, 13 new positions [cleared by the Expenditure Finance Committee (EFC)] and existing 6 vacant positions were advertised. Appointment letters were issued to seventeen staff, of which the following have joined: 3 epidemiologists, 1 communication officer, 1 documentation officer, 1 training manager, 1 media scanning assistant and 1 consultant IT. No suitable candidate identified for 2 consultant advisor positions advertised.

At the state level, there has been attrition, largely in non-technical positions, which is understood given the huge market for IT skills within the country, right down to the district levels. The current HR position is summarized as under:

- 134 of 231 sanctioned epidemiologist positions filled, of which 95% trained;
- 20 of 26 sanctioned microbiologist positions filled, of which 85% are trained;
- 7 of 9 sanctioned entomologist positions are filled, of which 86% are trained;
- 5 of 9 sanctioned training consultants in position; of which 100% are trained;
- 7 of 9 sanctioned finance consultant positions are filled, of which 71% consultants are trained;
- 8 of 9 sanctioned data manager positions at State Surveillance Unit (SSUs) are filled with 100% of these trained;
- 8 of 10 sanctioned data entry positions at SSUs are filled with 100% of personnel trained;
- 199 of 225 sanctioned data manager positions are filled with 87% of recruited personnel trained;
- 247 of 280 sanctioned data entry operator positions at DSUs are filled with 79% of personnel trained.

Recruitment of epidemiologists continues to pose a challenge for most states, especially Tamil Nadu and Karnataka. While TN has taken a stand for recruiting routine medical officers on the epidemiologists' positions, with a commitment for vacancies being filled by January 31, 2011; Karnataka has completed first phase of recruitments and is pushing for a second phase by mid November. Moreover, assurances have been provided at the DoHFW during the field visit that the recruitments will be provided highest priority.

The IDA credit supports IDSP's intensive training program in all the 35 states. As of October 2011, Induction Training was completed for all cadres of recruited staff. While TOT training was completed for all 35 states/Union Territories, 113% of the estimated training load for master trainers had been completed in the nine priority states. From April 2010 till date, 512 State/District RRT members were trained as Master Trainers taking the total number of master trainers to 2562. Moreover, the Field Epidemiology Training too has almost completed the training load with 217 of 219 trainees having completed the training as of October 2011. Additionally, 128 state surveillance teams were trained between April –October 2011. 216 DSOs were trained in the 2 week FETP training in the same time span. A monitoring tool was recently developed at the CSU level to monitor the progress of trainings and this has been applied to induction training for data managers at the CSU. The CSU has also undertaken

field visits to training institutes, and a system for analytical feedback to these institutes is proposed to be commenced. Training manuals for hospital doctors, paramedical staff and data manages on IDSP has been developed and uploaded on the IDSP portal.

Name of the Training	Training Load	Trained till April 2011	Trained from May to October 2011	Total trainings completed
TOT (Master Trainers)				
9 Priority States	921	1033	NA	1033 (111%)
26 States	1609	1456	143	1599 (99.3%)
2-week FETP				
9 Priority States	219	205	10	215 (98%)
26 States	377	167	91	258 (68%)

The CSU has advocated with the MoHFW for ensuring continuation of all contracted positions within IDSP post project and these positions have been allowed for in the PIP of NRHM for years 2012-13.

Issues: While the CSU has achieved more than the planned TOT training, efforts need to be made to document and track the productivity and quality of the master trainers in the field. Also, with the frequent movement of the non-technical IT staff in the states, it is important to keep a track of the number of positions with untrained incumbents so as to facilitate an early induction and training for them.

Agreed Actions:
- Strengthen HR data base with tracking of trained technical and non-technical staff as well as positions with untrained recruits. As a starting point, trainees in 2011 to be listed on portal, state-wise.
- Track outputs and efficiency of master trainers in field.
- Analytical feedback to training institutes will be provided by the CSU.

Information and Communication Technology (ICT)

IDSP, in its restructured form finances the nationwide maintenance of the IT hardware, broadband connectivity and maintenance of satellite network, as well as the toll-free number call center and the setting up of a Strategic Health Operations Center (SHOC).

Progress: Of the 400 planned training centers on a satellite and broadband based network, 367 have been installed by ISRO as of date. Of the equal number of training centers on a broadband based network, 378 have been installed by NIC. Additionally, NIC has installed 776 of 800 planned data centers, 736 of 800 broadband connections and 36 of 38 Hi-end videoconferencing facilities. The Annual Maintenance Contracts (AMC) for equipment supplied by NIC for data and training centers has been decentralized to the states vide communication of July 2011. While five states have acted on this communication with alacrity, for the state of Andhra Pradesh the file which is pending with NRHM, and for the states of Uttaranchal and West Bengal no action has been taken to date. ISRO has provided assurance to the project that it will negotiate for the AMC for its supplied equipment will the service provider on a prospective basis at last agreed rates once the VSAT becomes functional.

The status of the functionality of these IT inputs in the nine priority states is as follows:

Name of State	Data Centre (NIC)			Training Centre (NIC)			Training Centre (ISRO)		
	Total	**Installed**	**Functional**	**Total**	**Installed**	**Functional**	**Total**	**Installed**	**Functional**
Andhra Pradesh	37	37	34	23	23	21	14	14	Functionality of the site cannot be checked as the VSAT network is down since September 2010
Gujarat	36	36	36	0	0	0	36	34	
Karnataka	34	34	34	27	27	27	7	7	
Maharashtra	57	57	54	0	0	0	57	48	
Punjab	24	24	22	20	20	18	4	4	
Rajasthan	39	39	39	32	32	32	7	7	
Tamil Nadu	48	48	48	0	0	0	48	48	
Uttarakhand	15	15	15	0	0	0	15	13	
West Bengal	31	31	30	18	17	17	13	7	
Grand Total	**321**	**321**	**312**	**120**	**120**	**112**	**201**	**182**	

92% of districts are reporting on the ‘P’ and ‘L’ forms on the portal. Currently 14 districts are yet to create master data on the portal. Moreover, all districts except seven from the priority states have to revert to CSU confirming the RUs within each district such that the master data file is frozen in the portal. A timeline of end November 2011 has been fixed for to complete this activity. The CSU is proactive in solving any portal related issues on a daily basis. A synopsis of action taken is shared with the Bank periodically. Emphasis will now also be laid on lab reporting to migrate completely to the portal from email reporting. The contract with the IDSP 24X7 toll free call center was renewed for an additional months till project closure on existing terms and conditions. Some states have reported that connectivity to the 1075 number is poor in some districts while the longer 1800-11-4377 number works well. This poses a problem since the longer toll free number is difficult to recall. Between February 2008 till October 20, 2011, a total of 2,58,824 calls were received by the call center. Of these 35, 447 calls pertained to swine flu. The CSU has established, in July 2008, a systematic media-scanning and verification mechanism to support outbreak detection. National and major State electronic, broadcast, and print media are monitored; findings evaluated and referred to SSU and DSU if a disease outbreak appears to be mentioned. The CSU has shared with the Bank analysis of the number of media alerts received since January 2009 till date. Since the VSAT network of ISRO is down since September 2010, the VC facilities were non-operational. The issue was resolved with procurement of an inter-wise cable for use over the broadband facility provided by NIC which has enabled the VC facilities. Except for the states of West Bengal and Karnataka, all other priority states have functional VC facilities; and since April 2011, a total of 190 VC sessions were conducted intra and inter-state for discussions. IDSP plans to set up a SHOC which would function as a resource for ongoing training/knowledge sharing, and as a key communication center for emergency epidemic response. The procurement processes for installation and operationalization of SHOC are in advanced stages. It is anticipated that the SHOC will be up and running by January end 2012.

Issues: Finalization of the master data on the portal from each district is critical to robust data analysis. Only 7 of 225 districts in the nine priority states have confirmed their master data. The non-functionality of the VSAT network of ISRO has rendered dysfunctional the training centers supported by ISRO since September 2010. This has also compromised the health of the equipment installed by ISRO since initiation of AMC of the equipment requires VSAT connectivity. AMC of all NIC supported equipment should also be covered by AMC at the earliest, wherever not done by the states. While health facilities have mostly migrated to portal reporting, reporting by DPLs and labs within the referral network is largely over email. To minimize errors over data transfer and handling, it is important that the labs migrate to portal reporting at the earliest. NIC must monitor the functionality of the 24X7 ‘1075’ toll free number. The VC facilities should be used more extensively for monitoring and evaluation by the states

and to resolve issues between SSUs and CSUs. With limited time available with the project, it is important that the procurement processes for SHOC be completed at the earliest, the contract for establishing SHOC be awarded and the SHOC established by January 31, 2012 as planned.

Agreed actions:
- Master data for nine priority states to be finalized by December 15, 2011
- Labs to migrate to portal reporting by January 01, 2012
- SHOC to be operationalized by February 28, 2012
- Monthly VC meeting of SSUs and DSUs in each priority state as per fixed schedule to be commenced by December 15, 2011
- Monthly review of nine priority states SSUs by the CSU over VC to be commenced by January 01, 2012.

Data Management

Progress: On an average almost 92% of districts are reporting on 'P' and 'L' forms respectively for the reporting cycle of April-September 2011 as against 91% of districts reporting on 'P' form and 88% of districts for 'L' form for the October 2010-March 2011 reporting cycle. While the maximum percentage of districts reporting on 'P' form in a week was 96% that for 'L' form was 97% in the same reporting span. Also, the average number of RUs for 'P' form was 71% and 67% for 'L' form, while the maximum RUs reporting on 'P' were 76% and 73% for 'L' forms.

A synopsis of districts reporting on 'P' and 'L' forms is tabulated below:

Districts reporting on 'P' form

S.NO.	State	No. of Dist.	2010				2011							
			Oct-Dec				Jan-Mar				Apr-Sep			
			Average Reporting		Max. Reporting		Average Reporting		Max. Reporting		Average Reporting		Max. Reporting	
			No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.
1	Andhra Pradesh	23	15	65%	17	74%	18	78%	22	96%	23	100%	23	100%
2	Gujarat	26	25	96%	26	100%	26	100%	26	100%	26	100%	26	100%
3	Karnataka	27	27	100%	27	100%	27	100%	27	100%	25	93%	27	100%
4	Maharashtra	35	28	80%	30	86%	28	80%	29	83%	29	83%	32	91%
5	Punjab	20	18	90%	20	100%	20	100%	20	100%	19	95%	20	100%
6	Rajasthan	32	25	78%	28	88%	29	91%	32	100%	27	84%	29	91%
7	Tamil Nadu	30	27	90%	29	97%	27	90%	29	97%	30	100%	30	100%
8	Uttarakhand	13	10	77%	11	85%	12	92%	13	100%	11	85%	13	100%
9	West Bengal	19	18	95%	18	95%	18	95%	18	95%	18	95%	19	100%
Total		225	193	86%	200	89%	205	91%	210	93%	208	92%	217	96%

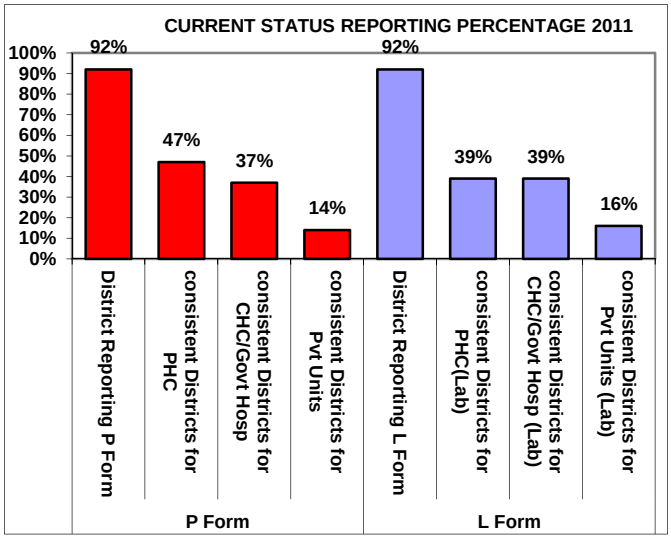
Districts reporting on 'L' form

S.NO.	State	No. of Dist.	2010				2011							
			Oct-Dec				Jan-Mar				Apr-Sep			
			Average Reporting		Max. Reporting		Average Reporting		Max. Reporting		Average Reporting		Max. Reporting	
			No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.	No. Rep.	% Rep.
1	Andhra Pradesh	23	14	61%	15	65%	17	74%	20	87%	21	91%	23	100%

2	Gujarat	26	25	96%	26	100%	26	100%	26	100%	26	100%	26	100%
3	Karnataka	27	27	100%	27	100%	27	100%	27	100%	25	93%	27	100%
4	Maharashtra	35	27	77%	29	83%	27	77%	29	83%	29	83%	32	91%
5	Punjab	20	18	90%	20	100%	20	100%	20	100%	19	95%	20	100%
6	Rajasthan	32	23	72%	27	84%	28	88%	31	97%	26	81%	28	88%
7	Tamil Nadu	30	25	83%	28	93%	25	83%	27	90%	30	100%	30	100%
8	Uttarakhand	13	9	69%	10	77%	11	85%	13	100%	12	92%	13	100%
9	West Bengal	19	17	89%	18	95%	18	95%	18	95%	18	95%	19	100%
Total		225	185	82%	195	87%	199	88%	203	90%	206	92%	218	97%

In terms of the overall consistency of the districts reporting on 'P' and 'L' forms, the following table provides a gist:

No. of Districts	225
% District Reporting P Form	92% (208)
% consistent Districts for PHC- P Form	47% (105)
% consistent Districts for CHC/Govt Hosp P Form	37% (83)
% consistent Districts for Pvt Units- P Form	14% (32)
% District Reporting L Form	92% (206)
% consistent Districts for PHC- L Form	39% (87)
% consistent Districts for CHC/Govt Hosp L Form	39% (87)
% consistent Districts for Pvt Units- L Form	16% (35)



Issues: While the project has indeed made significant improvement in both consistency and timeliness of reporting, there is a long way to go to meet the targets set for reporting. A lot of efforts needs to be made at the CSU, SSU and DSU levels to ensure collation and transmission of daily/weekly OPD data from major hospitals and medical colleges.

Agreed actions:

- SSU to follow up closely on the collection and transmission of out-patients data in Medical colleges and major hospitals.
- Never reporting on portal districts from nine priority states to be reduced by half by December 15, 2011
- Districts irregularly reporting in nine priority states to be reduced by half by December 31, 2011

Outbreak Surveillance

Progress: As of 2011, with the exception of Maharashtra, all priority states clocked a more than 80% timely and consistent reporting on the weekly Early Warning Signal (EWS) outbreak reporting. The appended table provides a trend in the year wise reporting on outbreaks by the nine priority states.

Sl. No.	State	Year				Total
		2008	2009	2010	till Oct. 9, 2011	
1	Andhra Pradesh	72	64	75	70	281
2	Gujarat	24	49	83	125	281
3	Karnataka	54	97	90	176	417
4	Maharashtra	99	27	65	96	287
5	Punjab	17	22	18	41	98
6	Rajasthan	8	43	84	61	196
7	Tamil Nadu	50	113	90	91	344
8	Uttarakhand	27	30	25	32	114
9	West Bengal	49	43	89	154	335
Total		400	488	619	846	2353

Number of Outbreaks reported

Year	All 35 States/UTs	9 WB funded States/UTs
2008	553	400 (72%)
2009	799	488 (61%)
2010	990	619 (63%)
2011 **(till October 9)**	1323	846 (64%)

In terms of the number of disease outbreaks for which lab facilities were accessed and which were lab confirmed, the situation has been improving over the years.

Activity	2008		2009		2010		2011 (9th Oct.)		Total
	No.	%	No.	%	No.	%	No.	%	
ALL STATES									
No. of outbreaks where Lab accessed	168	30%	643	80%	622	63%	697	53%	2130
No. of outbreaks Lab confirmed	132	24%	137	17%	153	15%	222	17%	644
Total no. of outbreaks reported	553		799		990		1323		3665
PRIORITY STATES									
No. of outbreaks where Lab accessed	122	31%	433	89%	430	69%	486	57%	1471
No. of outbreaks Lab confirmed	90	23%	90	18%	85	14%	150	18%	415
Total no. of outbreaks reported	400		488		619		846		2353

However, only 73% (621/846) of all outbreak investigations for the nine priority states was conducted within 48 hours of the first case information, and only in 57% (486/846) of cases were appropriate human samples were sent for lab investigation. Here, we also need to consider the fact that human samples are not available in outbreaks such as food poisoning and that currently India does not have lab facilities for lab confirmation of chicken pox. Moreover, it is not possible for all human samples to be lab accessed in such conditions. Of these only 18% (150) of all outbreaks were etiologically confirmed. Only 5% of outbreaks had a final outbreak report made available. This compares very poorly with the extremely ambitious target set at 75% of all outbreaks.

The table below provides disaggregated data from the priority states on the 32 disease conditions monitored by IDSP with respect to the lab access of adequate human samples. We note that for year 2011 (till October 9, 2011), in 18 of 32 disease conditions, the target of adequate samples from 75% of outbreaks accessing labs, was met. For four viral disease conditions where the sample access to labs was less than 75%, the country does not have appropriate technology for testing of human samples.

Sl. No.	Disease Outbreaks (PRIORITY STATES)	2011 (upto 9th Oct.)				
		Total	Lab Accessed (includes lab confirmed)		Lab confirmed	
			No.	%	No.	%
1	Acute Diarrhoeal Disease	281	156	56%	2	1%
2	Food Poisoning	178	43	24%	1	1%
3	Measles	70	29	41%	3	4%
4	Viral Fever	52	44	85%	5	10%
5	Chikungunya	28	27	96%	14	50%
6	Viral Hepatitis	59	50	85%	18	31%
7	Dengue	29	29	100%	24	83%
8	Cholera	37	37	100%	37	100%
9	Malaria	29	29	100%	26	90%
10	Chicken Pox	33	1	3%	0	0%
11	Leptospirosis	9	9	100%	9	100%
12	Enteric Fever	4	4	100%	1	25%
13	Acute Encephalitis Syndrome	8	6	75%	2	25%
14	Anthrax	7	7	100%	1	14%
15	Acute Respiratory Illness	1	0	0%	0	0%
16	Dysentery	4	1	25%	0	0%
17	Meningitis	1	1	100%	0	0%
18	Mumps	2	1	50%	1	50%
19	Acute Flaccid Paralysis	2	2	100%	0	0%
20	Diphtheria	3	3	100%	1	33%
21	PUO	0	0	0%	0	0%
22	Scrub Typhus	1	1	100%	1	100%
23	Crimean-Congo Hmg. Fever	2	2	100%	2	100%
24	Epidemic dropsy	2	2	100%	0	0%

25	Gas Poisoning	1	0	0%	0	0%
26	Kala-Azar	1	1	100%	1	100%
27	Buffalo pox	0	0	0%	0	0%
28	Kyasanur Forest Disease	1	1	100%	1	100%
29	Pertussis	0	0	0%	0	0%
30	Rubella	0	0	0%	0	0%
31	Viral Hepatitis B	0	0	0%	0	0%
32	Vitamin A overdosage	1	0	0%	0	0%
	SUB-TOTAL (Priority States)	846	486	57%	150	18%

Laboratory access rates have been below 70% (bench mark) for Acute Diarrheal diseases (56), Food Poisoning (24), Measles (46), Dysentery (25), ARI (0), Mumps (50) Chicken pox (3) and PUO (O).

ADD: Acute diarrheal diseases outbreaks constitute one third of all the outbreaks in 2011, the proportion of sample collected (56%) fall short and since the positivity among the sample collected is around 1% the appropriateness of the sample collection and the transport media used may be revisited and appropriate corrective measures need to be taken.

Food Poisoning: Outbreaks of food poisoning are in second place in both priority and other states and constitute nearly 21% & 16% of all outbreaks reported in focus and other states respectively while the lab access rates stand at 24% and 30% respectively. This may be due to a common attitude of attributing the outbreaks to an event or a function known. There is a need to look at these outbreaks more rationally and make an attempt to confirm the diagnosis by taking appropriate samples. We also have seen instances of collecting only the food shared instead of human samples (vomiting/ stools).

PUO: Pyrexia of unknown (PUO) origin is yet another condition often taken lightly. All the fevers falling under this category and failing confirmation of all routine tests need to be submitted for other tests like scrub typhus, virus isolation etc.

Measles: The measles outbreak confirmation is not yet universalized in the Universal Immunization Program; therefore optimum efforts are not made. With only 3-4 % positivity rates, the timing of the sample collection and the provisional diagnosis made may need to be revisited.

Dysentery: There were only 4 reported outbreaks (of which in only one samples was sent for testing and turned out to be negative), all of which were in priority states. The number is small to make any comment except suggesting that samples be collected in all dysentery outbreaks and tested for both bacillary and amoebic dysentery.

Mumps: Of the 5 outbreaks reported (2 in focus and 3 in other states), samples of only 1 outbreak in priority state was taken which turned positive. The states and districts need to make efforts to collect more samples.

Chicken pox: Has no proven or recommended test is available as of now.

Issues: More strenuous efforts need to be made at the ground level by the DSUs and SSUs to ensure that appropriate quantities of human samples are collected from the outbreak site and sent in for lab investigation. Follow up must be made routinely to ensure that all relevant outbreaks are etiologically confirmed and a final outbreak report is created for the each episode.

Agreed Actions:

- State surveillance units to actively use the assessment and review tool for all outbreak reports (FIR & final).
- Disease wise lab access data to be compiled and shared with the Bank by December 15, 2011, and efforts made to improve lab accession in diseases where the rates continue to be low despite adequate testing facilities being available.

Laboratory activities

Under the restructuring, the focus of the laboratory sub component is to demonstrate success in the nine selected states by (i) supporting 17 district level priority public health laboratories, and (ii) building up a referral network through partnering with 65 existing and functioning laboratories, using output based agreements.

Progress: As of October 2011, procurement of equipment has been completed in eight of the nine priority states (West Bengal having partially completed procurement); microbiologists have been posted at the SSUs of seven states (with the exception of Gujarat and Maharasthra) and in all the 17 DPLs. 15 of the 17 DPLs are reporting to the CSU on 'L' forms, though this reporting now needs to migrate completely to the portal.

States	Name of District Priority Lab	Percentage reporting by each lab			Tests reported
		Apr-July 2011	Aug-Sept 2011	Total	
Andhra Pradesh	District hospital lab, Mahbubnagar	83%	91%	88%	Widal, ELISA for Dengue & Chikungunya
	District hospital lab, Ongole	Nil	Nil	Nil	NA
Gujarat	General Hospital Mehsana	100%	83%	92%	Widal, ELISA for Dengue
	General Hospital, Sabarkantha	100%	83%	92%	Widal
Karnataka	District hospital Lab, Chitradurga	83%	91%	88%	Widal, ELISA for Dengue & Chikungunya, culture for cholera and chikungunya
	District hospital Lab, Udupi	100%	67%	83%	Widal, ELISA for Dengue & Chikungunya, culture for cholera and chikungunya
Maharashtra	District hospital Lab,Beed	8%	8%	8%	Widal
	District hospital Lab,Nasik	17%	17%	17%	Widal, Dengue (rapid)
Punjab	Civil Hospital, Mohali	75%	75%	75%	Widal, ELISA for Dengue
Rajasthan	District hospital Lab, Ajmer	Nil	Nil	Nil	NA
	District hospital Lab, Sikar	83%	100%	92%	Widal, ELISA for Dengue
Tamil Nadu	District hospital Lab, Cuddalore	100%	91%	96%	Widal, ELISA for Dengue
	District hospital Lab, Ramanathapuram	75%	91%	83%	Widal, ELISA for Dengue
West Bengal	Malda District Hospital Pathology Laboratory, Malda	58%	58%	58%	Widal

	District Hospital Laboratory, Murshidabad	8%	50%	29%	-
Uttarakhand	District hospital, Pauri	100%	100%	100%	Widal, ELISA for Dengue, cholera culture
	District hospital, Almora	58%	75%	67%	Widal, ELISA for Dengue, Blood culture, cholera culture

A national expert group has been constituted under MoHFW to provide technical assistance to the DPLs. The group met on October 18-19, 2011 and suggested that blood culture for typhoid should be done in place of Typhidot and WIDAL test. Next steps on this recommendation now need to be planned and undertaken.

Issues: SSUs have not yet sufficiently engaged in the mobilization of adequate samples and the promotion of a better integration of the IDSP priority laboratory as a part of the main laboratory of the district hospital in order to generate lab based surveillance data. It is essential that a culture of investigations samples on routine basis be created rather than investigation of samples only during outbreaks.

Agreed actions:
- 17 DPLs to report through portal by January 1, 2012.
- Dissemination of recommendations of National Expert Committee on labs regarding typhidot and Widal test to all states by December 15, 2011.

B*uilding a referral laboratory network*

While the above mentioned district priority labs will provide laboratory services for outbreak prone diseases within the boundaries of their specific districts, the other 225 districts of the 9 priority states have access to quality laboratory services for outbreak investigations through the establishment of the Laboratory Referral Network, using the services of 65 existing and well functional laboratories.

Progress: As of October 2011, lab certification and MOU signing has been completed in all nine priority states. Seed fund of Rs 2 lakhs each has been disbursed to each state except West Bengal. Referral lab network is functional in all states except WB with quarterly reports being available from seven states (AP and WB excluded).

Issues: Prior to the closing of the project, it is important to introduce quality assurance within the lab facilities established under the aegis of IDSP. Towards this, the EQAS should be finalized at the earliest and at least one round demonstrated before project end.

Agreed actions
- A workshop for all nodal officers from 17 DPLs and 65 referral labs be held at NCDC for orientaoitn to IDSP as well as for experience sharing and problem resolution
- Identify EQAS organizers and complete one round of EQAS in all 65 labs under the state referral lab networks and well functioning district priority labs.

Laboratory assessment
Post procurement audit report for equipments supplied to Phase-1 states under IDSP has been submitted by the hired consultant M/s Technomed Services. A meeting was held to address deficiencies in report, following which, HSCC has submitted the Consignee receipt certificates (CRCs) of the equipment not found on site. CSU is following up with the States on the updated status of this equipment.

Avian Influenza Human Health

The human health sub component of Highly Pathogenic AI aims to minimize the threat posed to humans by AI infection and other zoonoses and prepare for prevention, control and response to an influenza pandemic in humans. It supports: i) strengthening and networking of 12 reference laboratories for prompt case confirmation: and ii) re-establishing seasonal influenza surveillance system for India.

Progress: 11 of the 12 planned labs for testing of samples for H5N1 and H1N1 have been functional. NEIGRIMS, Shillong is the only lab which is yet to test any human samples for either H5N1 or H1N1. Necessary reagents and materials have been provided to all labs. Training has been provided in March 2011, reporting format has been shared and three sentinel sites per lab too have been finalized for influenza testing. Since January 2011, four outbreaks of H5N1 have been reported amongst poultry in India, and no human case of H5N1 has been reported. In case of H1N1, till October 23, 2011, a total of 48,344 cases have been reported in India with 2796 fatalities. Between 2009 and October 2011, a total of 90,179 human samples were tested for H1N1 at the 11 supported labs; of these, 18,558 samples were tested positive. Amongst these, the most prolific labs are NCDC, Delhi; NIMHANS, Bangalore; Haffekine's, Mumbai; IPM PH Lab and F (H), Hyderabad; BJ Medical College, Ahmedabad; Kasturba Medical College, Manipal and SGPIMS, Lucknow. Since May 2009, a total of 35,181 samples have been tested for H1N1 by NCDC of which 22.8% tested positive. For 2011 alone, a total of 4643 samples were tested, of which 5% tested positive. The procurement of high value reagents for labs testing H5N1 and H1N1 is stalled for want of clearances from procurement cell of MoHFW. This needs to be addressed on priority since it is adversely affecting the testing capacity of the labs.

Issues: Procurement of high value reagents for the labs is delayed and may lead to disruption of supply to the network labs.

Agreed action: The Bank will follow up with the MoHFW to resolve this issue

ANNEX 5

SAFEGUARDS

Social Safeguards

The CSU has not prepared any detailed update regarding the community surveillance pilots implemented as a part of the Tribal Action Plan in states such as Gujarat, Maharashtra, Karnataka. Gujarat and Maharashtra were the only states to document their achievements in implementing the community surveillance pilot. No information was available from states of Andhra Pradesh, Karnataka, and West Bengal who had earlier shown interest in this area. Gujarat implemented the community surveillance pilot among the tribal communities in two Taluks in the Tapi district, whereas Maharashtra did so in Taloda and Akalkuva blocks of the Nandurbar district. Karnataka which implemented the pilot in Gundulpet and Kollegal blocks in Chamrajnagar district did not provide any further update. Orissa continues to implement its TAP pilot in the Koraput district. The Mission visited a few places in Akalkuva block of Maharashtra, and Tapi district of Gujarat to interact with the PHCs, Sub-centers, and community health workers.

Maharashtra: The focus on community surveillance strategy has been to: a) train the community health workers (ANMs and ASHAs) in key communicable diseases and set out guidelines for suspected outbreak reporting; b) providing ASHAs with incentives for reporting outbreaks; c) and promoting water purification through community volunteers. Maharashtra has 173 and 453 ASHAs respectively in Taloda and Akalkuva blocks, who have received training in S Form reporting, however, the emphasis has been mostly on outbreak reporting. Out of 14 outbreaks of communicable diseases reported from the district during 2010-11, and 2011-12, 44 % were reported by the ASHAs whereas 21% were reported by the villagers. Weekly reporting of syndromic surveillance was not up to mark, as reported by the state IDSP team. The Maharashtra SSU has identified two areas for improvement: (a) promoting efficient use of the call center number 1075; and (b) providing incentives to community informants for outbreak reporting. The mission visited one PHC in Dab village and a sub-center in Amli Resettlement village and interacted with the community health workers. The tribal people live in isolated places and depend on subsistence agriculture. They have low levels of education; however, they access health services provided by the state. Interaction with ASHA workers indicated that their efficiency with filling up the S Form was limited. They reported the cases and the S forms were filled up by ANMs, who were well versed with it.

Gujarat: The Mission visited a number places in Tapi district to share the experience of community surveillance, including Ashrava sub-center in Nizar block, Kukarmunda PHC, Nizar CHC, Belda PHC, Narayanpur Sub-Center, and Chhipabadi PHC. The mission interacted with ASHAs and Anganwadi workers at all these places. The pilot involved training of community volunteers, health workers, PRI representatives, and NGOs in the community surveillance process. The Tapi DSU prepared detailed baseline on health service, access, disease incidence and outbreak reporting patterns before starting the pilot and evaluated the impact after implementation. The evaluation showed marked improvement in syndromic reporting using S forms at the Sub-Center and PHC levels with a clear decrease in incidence of late or irregular reporting; in documentation and reporting systems; and in community awareness on outbreaks. There was a marked improvement in public awareness with regard to IDSP, and in early detection of diseases that can easily affect a large number of people quickly, steps in disease prevention, and public health services. The Pilot also showed a positive correlation with reporting on S, P and L Forms and increase in referrals in these blocks.

The CSU has hired documentation and communication officers as agreed earlier. The communication officer joined the mission to Gujarat. The communication and documentation specialists will assist with: (a) compiling information on IDSP process for public dissemination; (b) documenting and disseminating IDSP success stories and challenges; and (c) mainstreaming with NRHM, and building collaboration with academia, media, and corporate houses for strengthening disease surveillance. The Communication Officer should discuss ways to prepare state specific IEC strategies with the SSUs, and coordinate its IEC efforts with NRHM. The document which was prepared on disease patters among tribals as a part of TAP should be finalized with the help of the documentation officer.

Agreed Actions

- Finalize compilation of the document on disease patterns among tribal communities prepared earlier by the CSU;
- Compile state specific IEC and community surveillance plan and activities.

Environment Safeguards

With the support of WHO, NCDC has revised and uploaded the Laboratory Guidance manual on the IDSP website, which includes more comprehensive guidance on infection control and bio-safety measures in laboratories and also waste management practices, as per the national regulations. However given some of the sub-optimal practices in labs, including poor waste segregation, the Bank and WHO feel that it is critical that CSU ensures the availability and effective utilization of the manual at district levels.

Sustained behavioral change for good occupational practices requires continued capacity building and WHO has been supporting the CSU in conducting training sessions, which include issues related to bio-safety, safe handling of infectious material and quality assurance. WHO is also focusing on the need for epi-lab coordination, which requires surveillance officers to coordinate with microbiologists. The training sessions are to include district level laboratories with hired contractual microbiology staff (many of them new), referral medical colleges and state lab coordinators. The mission suggests that along with this training, guidance be provided to the laboratories with regard to systematic and regular on-site training and supervision.

The Bank and WHO would again like to reiterate the importance of setting up systems for regular vaccination of laboratory technicians to protect them for blood-borne hepatitis. This needs to be mandated by the CSU. Additionally the importance of dissemination and proper posting of awareness materials in all laboratories is critical and the mission would like to request the CSU to pay attention to this activity.

ANNEX 6

FIDUCIARY MANAGEMENT

Procurement

Human Health Component:

The procurement of 4 items (Kits and consumables) valued at INR 54 lakhs to be undertaken through Direct Contracting has been completed but the procurement of the remaining 2 items (INR 153 lakhs) is pending. One other DC item is being procured through NCB.

Purchase orders for 11 types of equipment valued at INR 68.85 are placed under shopping procedures, while 2 items are being procured through NCB and the quotations for 1 item are under evaluation.

Initially 4 items were to be procured through NCB. Subsequently 4 more items (2 equipment and 2 reagents under NS / DC) were added. The bids received under these 8 NCB procurements are under evaluation. For the procurement of -20 degree Centigrade refrigerators bids are to be re-invited as there no responsive bid were received.

Procurement of SHOC was initiated through NCB in September 2011. The Bid Evaluation was completed within the stipulated time and the Bid Evaluation Report (BER) is being reviewed by the Bank. The services contract for 24X7 Call Centre that was due to expire on October 31, 2011 is extended till March 31, 2012.

The Procurement Post Review (PPR) for 2011 will be conducted in Tamil Nadu during the week starting December 19, 2011 and during December 26-27, 2011.

Animal Health Component:

	NAME OF ITEM	STATUS
1	Prefabricated BSL-III at Kolkata	Supplied and installed in December 2009
2	Prefabricated BSL-III at Jallandhar	Supplied and installed in December 2009
3	Avian Influenza Kits - ICB 2009	Supplies completed
4	Prefabricated BSL-III at Bangalore	Supplied and installed in March 2011.
5	Prefabricated BSL-III at Bareilly	Assembling of Lab. completed in February 2011. Installation held-up on account of non-availability of the required electrical connections
6	Avian Influenza Kits – ICB 2010	Supplies completed
7	Shopping for Disposable Syringes, Serum vials etc.	Supplies completed

8	Shopping for Deep Freezers	Supplies completed
9	Design & Supervision Consultancy for BSL – III (Construction) at Pune and Guwahati	In progress. Contract signed on 20 May 2011.
10	Pre-qualification for BSL – III Construction at Pune and Guwahati	EOI issued on 21 October 2011. Bids received till 21 November 2011. Evaluation is in progress.
11	Design & Supervision of BSL IV (Construction) at Chennai	Project dropped during last project restructuring

Disbursement and Financial Management for MoHFW/CSU

Disbursement status

1. As of date, the undisbursed balance in the Credit for Human Health component stands at USD 23.849 million. With the part cancellation of USD 15.954 million under process, the undisbursed balance of USD 7.895 million will allow disbursements of approx. INR 38 crores during the remaining life of the project.

Interim Financial Reports

2. The reimbursement for the project that has been changed from SOE based to IUFR based disbursement (on semi-annual basis) effective from 01-Apr-2010. NCDC had submitted IFRs for the six month period 01-October-2010 to 31-March-2011 in June 2011. The review of the FMRs indicated that there was need to substantively revise the form and content, in a manner that would help to provide reliable and correct information on the funds released and utilized under the project. The World Bank financial management team has worked along with the IDSP financial management team to revise the FMRs; the changes are primarily in the presentation of fund releases and expenditures reported for (a) various training programs; (b) state/district level; and (c) AI Laboratories. The revised format now allows the opening and closing unspent balances for the purposes mentioned above to be reflected on the FMRs.

3. The IFRs for the next six month period ended 30-September-2011 is due to be submitted to the Bank by 30-November-2011.

Financial Staffing and Record Keeping:

4. As agreed during the project restructuring, NCDC has now established a FM cell with two qualified financial staff. The mission was informed that the FM consultants are actively involved in monitoring of financial management performance at the state and central level.

5. Accounting at NCDC: The accounting and record keeping practices followed at NCDC were reviewed during the mission and the following measures are suggested for further strengthening of these processes:

    i) *Monitoring of advances*: During the year 2010-11, NCDC released funds for Avian Influenza laboratories to 12 different medical colleges and regional institutes aggregating to INR 1.346 crores (including unspent opening balances and interest earned). Against these releases, the institutions reported expenditures of INR 18.79 lakhs only. In similar lines, substantial funds have been released during the year for training activities to various institutions. In the present

book keeping arrangements, a payment register is being maintained to record the all the payments being made. It is suggested that a separate advance register should also be maintained for the purpose of recording and tracking of advances given to the various parties, especially to the Training and Education Institutes. This will facilitate efficient monitoring of advances both period and party wise.

ii) *Reconciliation between NCDC and Pay & Accounts Office (PAO) records*: As per current practice, on-going reconciliation (between the payment records of NCDC vis-à-vis the details of payments made at PAO) is being prepared which is updated on a monthly basis. It is advised that signed records of the reconciliation should be maintained, on monthly basis, which can then be subsequently submitted to the Auditors at the time of annual audit. This practice will further streamline the process and strengthen the validity of this exercise.

6. ***Support to participating states:*** During the mission meetings with the state officers it was observed that in case of a number of fiduciary areas/issues, there still remains some un-clarity at the state level. The NCDC FM team was hence advised to further scale-up the monitoring and support activities provided to the 9 participating states. The mission also agreed that a workshop would also be organized in January 2012 to discuss the constraints and difficulties with respect to financial management.

External Audit 2010-11

7. During the mission the status of submission of annual audit reports of CSU, NCDC and the 9 participating states was discussed in detail. It is noted that:

i) *Overdue Audit reports*: the audit reports for the states of Gujarat and Rajasthan have not yet been submitted to the Bank. The due date for submission of these reports was 30-September-2011;

8. Additionally, the FM cell has been advised that the task of reconciliation of the audited expenditures with the expenditures reported and claimed for the year 2010-11 should be finalized by 31-January-2012.

State Visit to Karnataka:

9. In the state of Karnataka, under the IDSP program there are 28 District Surveillance Units (DSU) and 8 District Referral Labs (DRL). As part of the state review mission to the state of Karnataka, reviews were conducted at the State Surveillance Unit (SSU), District Surveillance Office (Chitradurga) and District Referral Lab (Bangalore Medical College). Listed below are the observations of the review of the accounting records maintained and the system of financial monitoring of DSU.

- ***Financial Consultant at SSU:*** Presently, the financial functions of the IDSP program unit (SSU) are being carried out by two administrative officers of State Health Society as the position of the financial consultant at the SSU stands vacant since May 2010. The mission was informed that currently, interviews are being conducted for hiring of the new consultant. The position is expected to be filled by December 2011.

- ***Records at SSU:*** Presently, the state program office is only maintaining the vouchers with respect to the expenditures incurred at the SSU. All the related accounting is being carried out only at the office of the Chief Financial Officer (CFO), NRHM. The state is advised to prepare certain basic accounting records such as Payment Register, Advance Register, DSU & Referral Lab Advance

and Expenditure Register at the program office. Also, on monthly basis a reconciliation should be carried out of the payment advices issued by SSU vis-à-vis payment released by CFO, NRHM.

- ***Monitoring of DSU & DRL by SSU:*** During the review visits to DSU & Referral Labs, it was observed that in a number of fiduciary areas/issues, especially component wise fund utilization, there still remains some un-clarity at the unit level. The mission suggests that the SSU should scale-up the monitoring and support activities provided to the district units.

- ***Quarterly and Monthly Reports:*** As a practice, DSUs and DRLs on monthly basis send funds and expenditure statement to the SSU. The SSU in-turn, on quarterly basis submits funds and expenditure statement of the state to the CSU, NCDC. On review of these statements it was observed that: (i) the quarterly statement submitted by the SSU reports only the expenditure and does not reflect the fund flow position. It is advised that the statement of fund, clearly stating the opening and closing balances along with receipt and payment position should also be submitted as part of the quarterly reporting; (ii) currently, the SSU's function is only limited to the consolidation of the monthly reports received by the various district units. It is strongly suggested that these statements should also be reviewed by the SSU prior to the submission of the state report to the CSU.

- ***De-facing of Vouchers:*** Presently, the practice of de-facing of vouchers is not being practiced both at the state as well as the district unit. This is of up-most importance especially in the light of the fact that at each of these unit's activities are being carried out under multiple programs. Therefore it is strongly suggested that the practice of de-facing of vouchers should be adopted.

Disbursement and Financial Management at DADF – Animal Health Component

Disbursement status

10. As of date, the undisbursed balance in the Credit for Animal Health component stands at USD 22.6 million as on November 25, 2011. The likely additional savings in the animal health component will need to be assessed at the earliest.

Interim Financial Reports

11. The reimbursement for the project that has been changed from SOE based to IUFR based disbursement (on semi-annual basis) effective from 01-Apr-2010. DADF has submitted Financial Management Reports (FMR) for the six month period 01-October-2010 to 31-March-2011. The review of the FMRs indicated that there was need to substantively revise the form and content, in a manner that would help to provide reliable and correct information on the funds released and utilized under the project. The World Bank financial management team has worked along with the DADF financial management team to revise the FMRs; the changes are primarily in the presentation of fund releases and expenditures reported for (a) various RDDLs and other institutions; and (b) prior review contracts. The revised format now allows the opening and closing unspent balances for the purposes mentioned above to be reflected on the FMRs.

12. The IFRs for the next six month period ended 30-September-2011 is due to be submitted to the Bank by 30-November-2011.

13. The status of financial progress may be summarized as follows:

    - Total cumulative project expenditures up to 31-Mar-2011 are reported at INR 61.118 crores;

- Of this, expenditures of INR 3.115 crores only have been considered eligible for reimbursement from the Bank Credit;
- INR 17.924 crores have been paid directly to UNOPS at DADF's request by the Bank from the Credit. These are essentially in the nature of advances and DADF will need to obtain the necessary documentation from UNOPS in order to settle these advances;
- Expenditures of INR 40.078 crores have been considered as ineligible for reimbursement from the Bank Credit and includes fund releases to state RDDLs, payments to Prasar Bharti, DAVP, ISRO, NICSI and other procurements not cleared by the Bank etc.;
- This includes fund releases totaling to approx. INR 20 crores to state RDDLs in FY07-08 and FY08-09 for which acceptable audit reports are awaited;
- Payments to EDCIL which exceed the contract value of INR 24 lakhs cleared by the Bank have not been considered eligible for reimbursement from the Bank Credit;
- Against the eligible expenditures of INR 3.115 crores and reimbursable expenditures of INR 2.783 crores, DADF has claimed expenditures amounting to INR 3.305 crores - excess claim of INR 0.522 crores will need to be adjusted with future claims;

External Audit 2010-11

14. The audit report for DADF for FY10-11 is now overdue. The due date for submission of these reports was 30-September-2011;

ANNEX 7

OBSERVATIONS FROM FIELD VISITS

The JIR included field visits to the district of Chitradurga in Karnataka, Nandurbar in Maharashtra and Tapi in Gujarat to review on ground performance of the human health components of the project. Appended are the findings of the JIR team from the field.

Karnataka

- KC General Hospital, Bangalore

It had various specialists as well as an ICU, a Neonatal ICU, 4 Operation Theatres and a dialysis unit. The average OPD attendance was approximately 1,000 patients per day of which nearly half were new patients. It had a capacity of admitting 450 patients and the bed occupancy ratio was about 80%. While the Physicians maintained individual OPD register, writing provisional diagnosis was not consistently followed.

The laboratory consisted of two rooms (of which one is a collection centre) and only basic laboratory tests were performed, primarily clinical pathology and biochemistry as it had a cell counter and a semi-auto-analyser. Specifically, the lab did not have Typhi Dot, CSF testing and bacteria culture facility and also does not send samples for culture. It depends on Widal for enteric fever diagnosis. The Microbiology tests consisted primarily of Widal and some rapid tests. Cultures were not done. The laboratory could easily perform basic microscopy tests with the existing infrastructure. The laboratory waste management needed attention especially segregation of waste.

The out-patient pharmacy had a robust system of documentation of drugs through individual pharmacy slips for each patient and a daily summary of drugs dispensed in registers. Computerization of this data could yield consumption patterns of medicines. Of approximately, 600 prescriptions that were filled daily, nearly 500 contained at least one antibiotic. On a particular day, nearly 70-80 prescriptions contained a combination antibiotic (ciprofloxacin + metronidazole / tinidazole) but only 12 packets of Oral Rehydration Solution (ORS) were dispensed. This probably reflects overuse of antimicrobials for acute diarrhoeal disease, and needs training of the prescribers for rational antimicrobial use.

Agreed action: The District Surgeon and SSO will initiate an orientation of doctors mid-November to facilitate streamlining the collation of data from various departments and the laboratory. Also, Typhoid culture facility in BMC will be used for better diagnosis of enteric fever.

- Bangalore Medical College, Bangalore

The department of microbiology, the referral lab for 5 districts (Bangalore Rural, Bangalore Urban, Kolar, Chikkaballapura and Tumkur), was attached to 4 associated hospitals. The lab was well-equipped and apart from doing cultures, was the state reference lab for HIV, as well as performed PCR testing for Hepatitis C virus. On average, 70-80 cultures and 30-40 antimicrobial susceptibility tests were done daily. All lab investigations were charged except for poor patients with BPL card.

The samples received by the IDSP referral unit since April 2011 were primarily from two districts (Kolar and Tumkur) out of five referral network districts and that too only for Cholera culture indicating under-utilization. Mobilization of routine samples from the reporting units in the catchment area needs to be done to streamline sample referral.

Adherence to biosafety guidelines during sample processing needs attention, as samples were being processed in a horizontal laminar airflow cabinet. Documentation of temperature records for various equipments was technician specific and could be streamlined and reinforced.

Agreed action: All expenses under IDSP referral lab network be subjected to internal audit and the Utilization Certificate and Statement of Expense be submitted to SSU.

- National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore

The visit focused only on the Influenza surveillance carried out by the institute, for which it received samples from the entire Karnataka state. Nearly, 22,000 samples were processed between Aug 2009 and March 2011, out of which 19% were positive for H1N1 and 12% for seasonal Influenza A. During the period – January to September 2011 – 2020 samples were tested, of which 86 (4%) were positive for H1N1, and 266 (13%) for seasonal Influenza A, with a trend of more seasonal influenza this year.

Three additional institutes were trained to carry out the H1N1 and Influenza testing (Narayana Hrudalaya, Manipal Hospital and Command Hospital, Bangalore). The logistics (especially reagent supplies and PPE) needed attention, to avoid disruption of routine testing due to stock outs.

Agreed action: Include one of the Government General hospitals (KCFH/Jayanagar General Hospital) for Influenza Surveillance

- Indira Gandhi Institute of Child Health, Bangalore

An autonomous tertiary care multi-specialty referral hospital for children with 450 beds (80% bed occupancy), plans to add another 350 beds. The Neonatal ICU had 40 beds and 15 ventilators; and Pediatric ICU had 40 beds with 8 ventilators. The nursery provided level 3 newborn care at very low rates with free care for BPL card holders. The institute conducts post graduate training (MD) with 9 students admitted every year. It has also been identified as a nodal centre for surveillance of vaccine preventable diseases.

The OPD has on average 100-120 (mostly referred cases) per day. The hospital gets a wide spectrum of patients with respiratory illnesses (TB, pneumonia, empyema, etc), TB meningitis, Dengue, Chikungunya, etc. An increase in Rickettsial infections diagnosed on clinical grounds coupled with serology had been noted in the current year. Routine surveillance with submission of P and L forms, not done routinely, may need coordination and training at the state level.

The lab was well-equipped with different sections and adequate faculty. The hematology section was well-equipped and was routinely screening for thalassemia and haemoglobinopathies. The microbiology section was capable of diagnosing the list of diseases under IDSP. Apart from Dengue and Chikungunya, Diphtheria (from Kolar and Chintamani) and Scrub Typhus (Weil Felix test) have been reported. Adherence to biosafety guidelines, especially during sample processing (avoiding the use of a horizontal laminar flow cabinet), and waste management are needed.

Coordination between the institute and DSU/SSU to capture surveillance data could yield rich dividends as the laboratory can also support etiologic confirmation.

Agreed action: DSO and SSO to coordinate an orientation workshop for pediatricians on IDSP case definitions and coordinate with the hospital authorities so as to improve reporting on the ‘P’ form.

- Taluka Hospital, Hiriyur, Chitradurga district

It had a paediatrician, gynaecologist, orthopaedic surgeon, dermatologist, ultrasonologist and radiology technician, and 21 staff nurses. However posts of physician and surgeon were not filled. The hospital sees

nearly 500-600 OPD patients per day, nearly 100 road traffic accident cases daily and conducts 100 deliveries / month. 2-3 post mortems are done every day.

Apart from routine hematology and biochemistry tests, the lab performs serological tests like Widal and rapid tests under microbiology. however referral to the district PH Lab for typhoid culture is poor.

- PHC Ranganathapura, Chitradurga district

It had 2 sub-centres with 4 villages each, catering to a population of 7,000. The staff consisted of 1 medical officer, 8 ASHAs, male and female health assistants (senior and junior). OPD attendance was approximately 40 per day of which nearly 25 were new patients. Facility of admitting 6 patients exists, though it appeared to be underutilized, with only 1-2 deliveries per month. Home deliveries are not common, and most patients prefer to go to the district hospital. The basic lab facility did smear for MP, Widal, sputum smear (for AFB) and urine tests. There was sufficient evidence of good surveillance as entry of provisional diagnosis was seen in OPD register which was also reflected in P form and the display of IDSP case definitions available in the PHC. PHC medical officer and both ANMs trained under IDSP had responded to an outbreak of ADD 5 months previously.

- Sub-centre Dodakatte, Chitradurga district

Catered to 4 villages with a population of 3,261. The 'S' forms daily diary were very well maintained.

- District Hospital, Chitradurga

It had 400 beds, and an OPD attendance of 25,000 per month (800-1,000 OPD patients / day). It conducted 400 deliveries per month (~150 cesareans per month).

The district hospital lab had a pathologist, but microbiology tests were referred to the IDSP priority lab. Temperature charting and biomedical lab waste management, especially segregation of waste at source) needed attention.

The district priority lab was functional with adequate staff and basic equipment in place. Though enough space was available, most IDSP activities were conducted in a cramped room, and reorganization might help streamline the functioning.

Equipment maintenance needed attention, especially the ELISA reader / washed as routine AMC not done. A single refrigerator was inadequate, and a biosafety cabinet was also needed. Lab waste management needs to be streamlined as per state guidelines. Though cultures can be done, very few samples for culture were processed. Resources for cultures were being wasted on culture of surface swabs from the operation theatre. Quality control for antimicrobial susceptibility testing needed to be strengthened.

Routine processing of stool and blood cultures was recommended to optimize the utilization of lab facilities. Blood cultures were recommended of few patients who were advised Widal test.

- District Public Health Laboratory

Both hospital and Public Health lab exist close to each other. However a lot of coordination is desired for improved performance of both. Sample Processing and, Sterilization & Washing, are operating from a single room. Adequate space is available in the lab and rooms can be segregated. The lab needs a bio safety cabinet. ELISA is non functional since July 2010, as per the microbiologist, AMC for Elisa has to be done -Modalities may be worked out in consultation with SSU & CSU. The bacterial culture facility is under-utilized by the entire district facilities.

- DSU Chitradurga

Data Manager captures weekly data from the district and does weekly data analysis for all IDSP disease conditions. The data manager showed the team the consistency report of the district. The district has established a District Media Scanning Cell and has reported and verified 7 Media alerts in 2010. 27 outbreaks were reported and responded by the district RRT in 2010. In 23 outbreaks, human samples were tested for Laboratory confirmation. IDSP has established the district priority lab at Chitradurga-

- Meeting with Principle Secretary, MD-NRHM ,Commissioner HFW and Director HFW:

The Principal Secretary (PS) and his team were apprised of the teams observations. The PS assured recruitment for the vacant epidemiologists positions. The PS has also assured steps to ensure that provisional diagnosis will be noted in the OPD slips and registers. The PS also assured follow-up with the secretary medical education for surveillance in the teaching hospitals. Observations for financial management function have been included in Annex 7

Agreed actions:

- The HFW department, Karnataka, will ensure explicit mention of provisional diagnosis in OPD chits and registers.
- The District Surgeon, Chitradurga, will support streamlining collation of data from various departments, promote use of laboratories for better diagnosis of enteric fever cases.
- The District Surgeon and the DSO, Chitradurga, will coordinate better for improved outcome of the district hospital and public health laboratories.
- The DSO and DH&FWO, Chitradurga, will energize Taluka hospitals for establishing better surveillance mechanisms and use of DPHL for better diagnosis and mobilizing adequate samples.

Maharashtra

Held discussions with State Surveillance Officer (SSO) Maharashtra, District Surveillance Officer (DSO) Nandurbar, and other health functionaries.

- Taluka Health Office, Akulkuwa

Discussions were held with Taluka Health Officer (THO) Akulkuwa and other health functionaries. Since the area is a tribal area out of 13 Primary Health Centres (PHCs) providing care to around 393 paras (hamlets) only 3 have communication by land line. 8 PHCs are in inaccessible and difficult to reach areas and cover a small population of about 8000-10000. Immunization is carried out by sending the vaccine on the day of the immunizations and the unused vials returned the same day as cold chain not able to be maintained in these PHCs.

- PHC Dab

PHC doctor was attending training so was not available. Records were not well maintained as the pharmacist had recently joined. However the reporting formats ‘S’, ‘P’ and ‘L’ forms were being maintained. OPD attendance varied from 14-25 daily. Laboratory was carrying out malaria smear examination with about 6 cases reported this year from the area. The PHC had 4 sub-centres Walamba, Dab, Amlibari and Amblipurnarwasan. ‘S’ form for the week examined (24-30 Oct 2011) had not been received from Walamba SC. Referral Hospital Card was filled up and patients sent but the feedback slip from the referral hospital had not been received. The bio-waste management including segregation of waste and outsourced disposal mechanism appeared satisfactory.

- Sub-Centre, Amblipurnarwasan

The SC was functioning well and met the ANM, ASHAs, Anganwadi workers and sarpanch and other people from the village for feedback.

Gujarat

Held discussions with District Development Officer who gave a brief overview of Tapi District and the health activities including screening for sickle cell anemia (130000 out of 300000 population carried out and computerized) which was a major public health problem in the district. Also held discussions with Collector, Tapi District; SSO, Gujarat; DSO, Tapi; and CDHO amongst others.

- Block Health Office (BHO)

Located in the CHC building itself, BHO covers Taluk Nizar which has 5 PHCs and Taluk Uchhal with 4 PHCs. All programs are reviewed weekly (usually on Fridays) with the 9 Medical officers of the PHCs.

- CHC, Nizar

A 30 bedded hospital with only one doctor who is the in-charge Superintendent, the hospital has no specialists posted and effectively functions as a PHC with only 4 in-patients (for observation) and around 100 out-patients seen daily. There is no other hospital and most patients go to Civil Hospital Nandurbar in Maharashtra which is reasonably close to their district. Only one outbreak in 17 August 2010 has been reported from Gavan in Uchhal, which was a food poisoning outbreak in school children and was epidemiologically confirmed as due to contamination of the milk packet. The outbreak investigation report and the lab report from a FDA laboratory was also available (negative). IDSP records were well maintained. The hospital waste management including segregation of waste and outsourced disposal mechanism appeared satisfactory.

- PHCs, Kukarmunda, Champawadi and Velda

These PHCs had one MBBS doctor and/or one BAMS doctor. Staff quarters were available in the campus in most of these PHCs. They had well maintained records for IDSP and also other national health programs which were kept in the pharmacy. A rubber stamp intimating that the disease was an IDSP disease was being stamped on the prescribing chit and this helped while transferring data weekly for the reporting formats ‘S’, ‘P’ and ‘L’ forms. The daily outpatient attendance was low (around 15-70 cases) being tribal areas. There was adequate drugs and vaccines (with cold chain maintained) except for Iron and Folic acid required by pregnant women for antenatal care. The labs were well equipped and functioning as Designated Microscopy Canters (DMCs for Tuberculosis and covered neighboring PHCs also) but were also carrying out malaria microscopy, HIV testing (ICTC) and testing for ante-natal care. About 4-5 patients were being detected positive for TB and malaria per month, and few HIV positive reported annually. Deliveries were being conducted in the PHCs (around 15-20 per month). Also, visited a Child Development and Nutrition (CDN) unit in PHC, Velda which was functioning efficiently with dedicated staff and had provided coverage to 162 malnourished children. The bio-waste management including segregation of waste and outsourced disposal mechanism appeared satisfactory.

- Sub-Centres (SC)

SC Ashrava of PHC Kukarmunda and SC Narayanpur of PHC Chitpur. Deliveries were not being conducted in the sub-centers. Discussions were held with the ANMs, ASHAs, and Anganwadi workers to ascertain the work they were involved in regarding IDSP. The diaries of these staff were perused and ‘S’ forms were being regularly sent. They were actively involved in reporting of cases of communicable diseases.