Annual Report

GHN-I-00-09-00006-01, Task Order 01
(or TB IQC Task Order 2015)

October 1, 2011 through September 30, 2012

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Summary

COUNTRY	India	REPORTING PERIOD	October 1, 2011 - September 30, 2012

FUNDING SOURCE	TO2015 FY09/FY10 carryover funds

OVERVIEW

With supporting from USAID, PATH and its partners will continue to support the CTD of the RNTCP and will collaborate with WHO, civil society consortia, and others working in TB control in the country, all of which have the ultimate goal of providing universal access to high-quality TB prevention, diagnosis, and treatment, and thus eliminating TB as a public health problem. PATH's strategic objective is to provide universal access to high-quality diagnosis and treatment for all TB patients in project areas. This objective will be achieved through activities designed to contribute toward improved case notification and treatment success rates, in addition to system strengthening of RNTCP Phase 3.

ACHIEVEMENTS

Strengthening laboratories, diagnosing more cases of MDR-TB

Ensuring that laboratories have the equipment, training, and procedures in place to diagnose TB, including drug-resistant forms, is critical to helping people access lifesaving treatment as quickly as possible. Laboratories that PATH played a pivotal role in upgrading for LPA diagnosed a total of 141 additional MDR-TB patients who commenced treatment during the reporting period. Prior to the laboratory upgrades, MDR-TB diagnosis was not available in the project areas. Now upgraded, the four laboratories provide MDR-TB diagnostic services for a total population of 92.7 million. In addition, the infrastructure of the IRL in Dehradun was upgraded for LPA, making it the first LPA in the state of Uttarakhand to be able to provide DST coverage for a population of 10 million people who otherwise would not have had access to critical services.

Universal access through integrated health delivery systems

In collaboration with Initiatives Inc., the Phase 2 human resource assessment was completed for the RNTCP. The assessment explored opportunities and constraints to integrating key functions of the RNTCP with the NRHM to ensure better program management and improved access by involving all health care providers. The human resource implications of universal access were also evaluated. The report was reviewed by the technical working group and later by the CTD Deputy Director General. A pilot activity is now being designed to test out the recommendations in four districts, and developing networks and capacities to ensure sustainability and scalability of the intervention. The CTD has also requested an assessment of its own human resource capacity, as well as a review of its management training curriculum and methods. Please see report for details and key findings.

Successful transition of public private mix model to local government in Andhra Pradesh

PATH has transitioned two successful PPM pharmacy projects in Andhra Pradesh, in Ongole, Prakasam District, and Rangareddy District, to local government authorities, and worked closely to support local government partners in building their own capacity to plan, implement, and monitor the PPM pharmacy model in other districts. Particularly in Andhra Pradesh, state officials have implemented and endorsed the model statewide. The Director General-Drugs & Copyright of the Drug Control Administration issued a formal circular emphasizing the importance of pharmacists and private chemists in expanding TB control services, and directed drug inspectors to monitor the sale of anti-TB drugs without a valid prescription. The circular now instructs all medical shops and pharmacies to maintain records of anti-TB drug sales and submit periodic reports to the Drug Control Administration. Since the project began, 152 chest symptomatics have been referred by 32 pharmacies in seven months, out of which 136 (90%) were evaluated, twelve were diagnosed with TB, and all were put on treatment.

CHALLENGES

Challenge	How is PATH addressing this challenge?
Administrative delays led to postponements of the laboratory management training, approval of the CTD-PATH MOU and recruitment. Indian visa requirements have also hampered ability to provide external support.	PATH has prepared the agenda and made logistical arrangements so that the training can be implemented in the next reporting period. Country-specific training material has been prepared by FIND and shared with the CTD. PATH continues to hold discussions and negotiations with the CTD to help finalize the MOU and obtain approval for recruitment.
Shifting priorities at different levels of the government regarding airborne infection control activities, and a growing priority to focus on addressing drug resistance which has delayed other types of activities including ACSM transition and DOTS strengthening.	PATH is currently holding discussions with the CTD to reach a decision on the priorities for airborne infection control activities and to clarify the priorities for other activities.

MAJOR CHANGES TO WORK PLAN THIS REPORTING PERIOD

Change	Why is PATH making this change?	Approval from USAID
District- and state-level ACSM activities have been removed or scaled down. PATH is now providing technical support to the Improving Healthy Behaviors Program implemented by FHI 360 on ACSM activities at the national level.	USAID requested that PATH provide technical support for ACSM activities that are streamlined with the Improving Healthy Behaviors Program being implemented by FHI 360.	This change was approved by USAID on March 21, 2012.
PATH has transitioned PPM activities to local government authorities in Prakasam and Andhra Pradesh.	USAID requested this change following the evaluation of TB IQC Task Order 1-supported TB activities in India, which was conducted in February 2011.	This change was approved by USAID via teleconference on January 29, 2012, and later confirmed at a meeting on March 7, 2012. Official email approval of the work plan was received on July 30, 2012.

ENVIRONMENTAL IMPACT STATEMENT
During the reporting period, laboratories were upgraded to include LPA. - There was no damage to sensitive ecosystems, as work involved only minimal upgrades in existing buildings. - Most of the materials were prefabricated; thus, there was no need to store equipment/machinery. - No toxic materials were used (the resin-based epoxy flooring was in semi-solid form, not powder, so it did not cause harm). - Every effort was made to avoid excess construction material, and any leftover material was recycled as possible. Disposal of unusable material was done in an environmentally sound manner by the contractors. - The coolant used was free of chlorofluorocarbons. - The negative-pressure rooms will mitigate any contamination while undertaking TB diagnostic work, and written guidelines and training for proper maintenance of the facilities have been provided. - Disposal of laboratory infectious waste is done in accordance with RNTCP guidelines. There has been no adverse impact of these activities on the environment.

Global Indicators

NATIONAL LEVEL

India

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	642,321	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate	79/100,000		2011
Number of new SS+ TB cases successfully treated	552,228		2010
Smear positive treatment success rate	0.84		2010
Number of MDR/XDR-TB cases diagnosed	4,221		2011
Number of MDR/XDR-TB cases who initiated treatment	3,384		2011
Number of TB patients tested for HIV	682,142		2011
Percentage of TB patients tested for HIV	0.45		2011
Number of TB/HIV patients on ART	25,425		2010
Number of health care providers trained in TB elements	35		October 1, 2011-September 30, 2012

New Delhi

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	13,776	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate	144/100,000		2011
Number of new SS+ TB cases successfully treated	11,566		2010
Smear positive treatment success rate	0.8		2010
Number of MDR/XDR-TB cases diagnosed	677		2011
Number of MDR/XDR-TB cases who initiated treatment	562		2011
Number of TB patients tested for HIV	32,020		2011
Percentage of TB patients tested for HIV	0.62		2011
Number of TB/HIV patients on ART	220		2010
Number of health care providers trained in TB elements	5		October 1, 2011-September 30, 2012

Karnataka

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	28,717	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate per 100,000 population	76/100,000		2011
Number of new SS+ TB cases successfully treated	22,542		2010
Smear positive treatment success rate	0.76		2010
Number of MDR/XDR-TB cases diagnosed	63		2011
Number of MDR/XDR-TB cases who initiated treatment	43		2011
Number of TB patients tested for HIV	64,241		2011
Percentage of TB patients tested for HIV	0.91		2011
Number of TB/HIV patients on ART	6,414		2010
Number of health care providers trained in TB elements	0		October 1, 2011 - September 30, 2012

Bihar

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	33,216	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate	45/100,000		2011
Number of new SS+ TB cases successfully treated	29,835		2010
Smear positive treatment success rate	0.866		2010
Number of MDR/XDR-TB cases diagnosed	0		2011
Number of MDR/XDR-TB cases who initiated treatment	0		2011
Number of TB patients tested for HIV	7,648		2011
Percentage of TB patients tested for HIV	0.1		2011
Number of TB/HIV patients on ART	Data not available		
Number of health care providers trained in TB elements	2		October 1, 2011 - September 30, 2012

Uttarakhand

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	5,454	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate	102/100,000		2011
Number of new SS+ TB cases successfully treated	4,734		2010
Smear positive treatment success rate	0.814		2010
Number of MDR/XDR-TB cases diagnosed	17		2011
Number of MDR/XDR-TB cases who initiated treatment	16		2011
Number of TB patients tested for HIV	5,804		2011
Percentage of TB patients tested for HIV	0.39		2011
Number of TB/HIV patients on ART	Data not available		
Number of health care providers trained in TB elements	3		October 1, 2011 - September 30, 2012

Maharashtra

Indicator	Value	Comments	Time period
Number of new SS+ TB cases notified	52,828	The RNTCP does not disaggregate by sex.	2011
Smear positive notification rate	67/100,000		2011
Number of new SS+ TB cases successfully treated	45,183		2010
Smear positive treatment success rate	0.805		2010
Number of MDR/XDR-TB cases diagnosed	772		2011
Number of MDR/XDR-TB cases who initiated treatment	534		2011
Number of TB patients tested for HIV	106,872		2011
Percentage of TB patients tested for HIV	0.79		2011
Number of TB/HIV patients on ART	7,210		2010
Number of health care providers trained in TB elements	2		October 1, 2011 - September 30, 2012

Results Framework

TO2015 FY09/FY10 India Carryover Work Plan

Goal Work toward universal access to quality diagnosis and treatment for all TB patients in project-supported areas.

OUTCOME	INTERMEDIATE RESULTS	INDICATOR TARGETS	RESULTS AS OF SEPTEMBER 30, 2012
Strengthened RNTCP capacity to improve case detection and treatment outcomes in project-supported areas	1.0 Improved case detection and treatment outcomes in project-supported areas.	New smear positive case notification rate.	57 cases per 100,000 population.
		NSP treatment success rate.	87% NSP treatment success rate.
		MDR-TB case notification rate.	0.1 per 100,000 population.
	1.1 Improved capacity to plan, design, implement, and monitor ACSM.	Updated national ACSM strategy document developed.	At the request of USAID, PATH is collaborating with FHI 360 to update the national ACSM strategy document. The activity will commence upon completion of the joint monitoring mission and hiring of a consultant by FHI 360.
		Operational handbook on ACSM developed.	At the request of USAID, PATH is collaborating with FHI 360 to create the operational handbook. The activity will commence upon completion of the joint monitoring mission and hiring of a consultant by FHI 360.
		Customized ACSM curriculum developed.	This activity is pending the completion of the national ACSM strategy and handbook.
	1.2 Strengthened capacity to engage all care providers in TB diagnosis and treatment.	PPM training module submitted to state authorities.	The PPM training module has been submitted to state authorities.
		Trained state-level resource group formed.	The state-level resource group has been formed in Andhra Pradesh and the State TB Training and Demonstration Centre in Hyderabad will serve as a central hub for future training.

OUTCOME	INTERMEDIATE RESULTS	INDICATOR TARGETS	RESULTS AS OF SEPTEMBER 30, 2012
Increased access to quality diagnosis and treatment of MDR TB in project-supported areas	2.0 Increased access to quality diagnosis and treatment of MDR-TB in project-supported areas.	MDR-TB case notification rate in project-supported areas.	0.1 per 100,000 population.
		Percentage of population covered by MDR-TB diagnostic services in project-supported states.	65% of the population is covered by MDR-TB diagnostic services in project-supported states.
	2.1 Increased capacity of laboratories to support MDR-TB diagnosis and monitoring of MDR-TB treatment.	Three targeted laboratories in which proficiency testing process has commenced.	The IRL in Dharampur is supporting MDR-TB diagnosis and monitoring of MDR-TB treatment. Additional laboratories will be targeted in the next reporting period.
		Three targeted laboratories accredited.	This activity has been delayed due to conflicting priorities of the CTD, including completion of civil society engagement activities and other laboratory enhancement activities.
		Number of specimens processed by targeted laboratories.	This activity will be implemented in the next reporting period.
		Number of MDR-TB cases diagnosed by targeted laboratories.	This activity will be implemented in the next reporting period.
	2.2 Improved MDR-TB patient support services identified in pilot district.	Ten health workers trained in MDR-TB counseling module.	The module is being developed by another partner. Upon completion it will be used to train healthworkers in the next reporting period.
		120 MDR-TB patients in target population provided with counseling adherence support.	This activity will be implemented in the next reporting period.

OUTCOME	INTERMEDIATE RESULTS	INDICATOR TARGETS	RESULTS AS OF SEPTEMBER 30, 2012
Strengthened health system capacity for DOTS and PMDT expansion	3.0 Strengthened health system capacity for DOTS and PMDT expansion.	400 districts implementing DOTS Plus.	435 districts are implementing DOTS Plus.
		60% of population has access to PMDT services in the country.	65% of the population has access to PMDT services.
	3.1 Strengthened capacity to plan and implement PMDT services at the central and state levels.	One PMDT Program Management Unit established at the CTD.	One PMDT Program Management Unit has been established within the CTD to strengthen the capacity to plan and implement PMDT services at the central and state levels.
		Ten districts visited for DOTS Plus appraisal.	Four districts were visited for DOTS Plus appraisal and provided with technical assistance this reporting period. Additional districts will be visited in the next reporting period.
	3.2 Improved capacity to plan and implement AIC activities at the national, state, and facility levels.	39 facilities implementing national AIC guidelines (Andhra Pradesh, Gujarat, West Bengal, Maharashtra).	A total of 39 facilities (in Andhra Pradesh, Gujarat, West Bengal, and Maharashtra) are implementing national AIC guidelines and have been provided with technical support.
		12 states trained in building design and engineering approaches to AIC.	14 states have received training in building design and engineering approaches to AIC.
	3.3 Improved access to information on human resource needs and planning to support DOTS expansion and integration.	Phase 2 human resource assessment completed.	With the support of Initiatives Inc., the Phase 2 human resource assessment has been completed and the report has been submitted to the CTD. A consultant has been hired and is currently working with the CTD to develop revised job descriptions for key staff, and the India TB project human resources specialist is in the process of developing the performance appraisal process and tools. The CTD has also requested a review of its management training curriculum and methods. This review will be conducted early in the 2012-2013 project year.

Activity Monitoring

TO2015 FY09/FY10 India Carryover Work Plan
Objective 1: Provide technical support to laboratories in project areas, in addition to strengthening IRL capacity to attain and maintain accreditation for culture and DST by addressing gaps in infrastructure, planning, and management to complement PATH's technical support.

Activity	OUTPUTS	TARGETS	EXPECTED DATE OF COMPLETION	STATUS AS OF SEPTEMBER 30, 2012	PROGRESS TO DATE
1.1 Provide technical assistance for accreditation of selected IRLs.	Number of laboratories accredited.	Three laboratories accredited (Indore, Dharampur, and Goa).	May-13	Delayed	Initial visits were made to the IRL in Dharampur, and samples are being handled for accreditation. This laboratory will be accredited in the next quarter. PATH is awaiting CTD's request for technical assistance to provide support for accreditation of the laboratories in Indore and Goa.
	Number of laboratories that started proficiency testing for solid culture.	Three laboratories started proficiency testing for solid culture (Itanagar, Guwahati,	May-13	Pending	PATH is awaiting confirmation of the CTD's preferences. This activity will continue in the next reporting period.
	Number of laboratories with infrastructure for culture and DST completed.	Four laboratories have completed infrastructure (Srinagar, Madurai, Hubli, and Tanda).	May-13	Delayed	Upgrade of the laboratory in Hubli was completed in September 2012. In Tanda, civil activities were completed by the RNTCP and a plan was developed for the installation of equipment. In Madurai, the layout has been finalized; however, the other activities have not yet been initiated by the RNTCP. The laboratory in Srinagar has not yet been visited, pending the request from CTD.
1.2 Provide management training and follow-up support for laboratory managers (directors, State TB Demonstration Centre) and microbiologists with the aid of existing partner training modules (PATH and FIND).	One workshop.	One workshop.	Next reporting period	Delayed	PATH is awaiting confirmation of proposed dates by the CTD. The activity is expected to take place before December 2012.
1.3 Conduct situation analysis on EQA for sputum smear microscopy in four states.	Draft report of situation analysis submitted to CTD.	One draft report submitted.	Dec-12	Cancelled	This activity has been cancelled at the request of the CTD.

1.4 Conduct experience-sharing workshops for IRL/NRL microbiologists and RNTCP consultants.	Number of workshops conducted.	Two workshops conducted.	Dec-11	Ongoing	One experience-sharing workshop for 52 participants (including nine resource persons) was conducted December 1–2, 2011. The second workshop will be supported by the CTD and another partner.
1.5 Lead the development of a validation protocol for BSL-3 laboratories.	Draft validation protocol submitted to CTD.	One validation protocol.	Next reporting period	Pending	This activity has commenced and is expected to be completed within the next three months.
1.6 Participate in National Laboratory Committee meetings.	National Laboratory Committee meetings attended.	One, as per date announced by the CTD.		Pending	No National Laboratory Committee meetings were held by the CTD during the reporting period.
1.7 Support infrastructure upgrades for laboratories.	Infrastructure upgrades for laboratories.	Six laboratories for LPA (or three LPA and one BSL-3 as decided by the CTD).	May-13	Ongoing	Infrastructure upgrades have been completed at the IRL Dehradun. two laboratories (IRL Dharmapur and PGI Chandigarh) have confirmed vendors, and the three remaining laboratories (Medical College Jodhpur, KIMS Hubli, and IRL Patiala) have finalized their layout plans.
1.8 Support equipment installation at three laboratories.	Installation of laboratory equipment.	Installation of laboratory equipment in three laboratories (KIMS, IRL Patna, culture and DST laboratory Tanda).	Next reporting period	Ongoing	Laboratory equipment has been installed in two laboratories (IRL Patna and KIMS Hubli). Installation of the final laboratory (Tanda) is ongoing and expected to be completed in the next reporting period.

Objective 2: Support expansion of AIC in high-risk facilities and improve national capacity to provide high-level expertise on infection control.					
Activity	**OUTPUTS**	**TARGETS**	**EXPECTED DATE OF COMPLETION**	**STATUS AS OF SEPTEMBER 30, 2012**	**PROGRESS TO DATE**
2.1 Continue to support the pilot on implementation of national AIC guidelines, including HIV high-risk settings.					
2.1.1 Facilitate supportive supervision visits.	Number of supportive supervision visits.	TBD.	n/a	Cancelled	This activity will be taken up by CTD
2.1.2 Facilitate health care facility follow-up risk assessments.	Number of health care facilities assessed.	35 health care facilities assessed.	n/a	Cancelled	This activity will be taken up by CTD
2.1.3 Advocate to strengthen country commitment to AIC.	Number of NAICC meetings held.	One NAICC meeting held.	Sep-12	Cancelled	No NAICC meetings were held during the reporting period.

2.2 Implementation of AIC measures in Maharashtra.					
2.2.1 Participate in governing committee meetings to plan, monitor, and guide the implementation of AIC measures in Maharashtra.			Next reporting period	Ongoing	PATH staff participated in two governing committee meetings to plan, monitor, and guide the implementation of AIC measures in Maharashtra.
2.2.2 Facilitation of sensitization workshop.	Sensitization workshop.	One sensitization workshop conducted.	Next reporting period	Delayed	PATH is awaiting confirmation of proposed dates from state authorities. This activity is expected to take place in the next reporting period.
2.2.3 Facilitate sessions of the capacity-building workshop for facility infection control focal points.			Next reporting period	Delayed	PATH is awaiting confirmation of proposed dates from state authorities. This activity is expected to take place in the next reporting period.
2.2.4 Baseline and follow-up facility risk assessments and dissemination workshop.	Facility risk assessments.	Four baseline and follow-up risk assessments conducted.	Next reporting period	Ongoing	Four baseline risk assessments were conducted: at GTB Hospital, Sewri; Mumbai Shashikala TB Hospital, Jaysinghpur; Kolhapur Chest Hospital, Aund, Pune; and TB Hospital, Amravati.
	Dissemination workshop.	One dissemination workshop conducted.	Next reporting period	Delayed	Will be conducted after follow-up risk assessments have been conducted.
2.3 Train engineers and architects who are responsible for health facility renovations and new facility design in effective infection control planning.					
2.3.1 Conduct trainings for engineers/architects with the assistance of PIH and the CDC, and provide ongoing technical assistance to participants.	Number of people trained. Workshops conducted.	Two trainings conducted for Indian engineers and architects.	n/a	Completed	Two AIC workshops have been completed and 34 Indian engineers and architects were trained.
2.3.2 Develop a module on building design and engineering approaches for AIC trainings in India.	AIC training module.	One AIC training module developed for use in India.	Next reporting period	Ongoing	A draft of the AIC training module is underway.
2.3.3 Create an Indian training resource group.	Training resource group.	Training resource group created.	n/a	Completed	The Indian training resource group has been created and six implementers have been trained at the national level, as well as at least three participants from 14 states selected by the CTD.
2.3.4 Develop an AIC checklist for engineers/architects for use in the building process.	AIC checklist.	One AIC checklist developed for engineers and architects.	Next reporting period	Ongoing	A draft of the AIC checklist for engineers and architects is underway.

Objective 3: Provide technical support at the national level in strategy development for ACSM.					
Activity	**OUTPUTS**	**TARGETS**	**EXPECTED DATE OF COMPLETION**	**STATUS AS OF SEPTEMBER 30, 2012**	**PROGRESS TO DATE**
3.1 Update the national ACSM strategy document for the RNTCP.	Updated national ACSM strategy document.	Updated national ACSM strategy document developed.	Next reporting period	Delayed	CTD approval pending. PATH and FHI 360 have discussed areas of collaboration, and will develop a joint plan of action after the joint monitoring mission results are released.
3.2 Develop an operational handbook on ACSM at the national level.	Operational handbook on ACSM.	Operational handbook on ACSM developed.	Next reporting period	Delayed	CTD approval pending. PATH and FHI 360 have discussed areas of collaboration, and will develop a joint plan of action after the joint monitoring mission results are released.
3.3 Develop a customized curriculum for ACSM capacity-building.	Customized ACSM curriculum.	Customized ACSM curriculum developed.	Next reporting period	Delayed	CTD approval pending. PATH and FHI 360 have discussed areas of collaboration, and will develop a joint plan of action after the joint monitoring mission results are released.

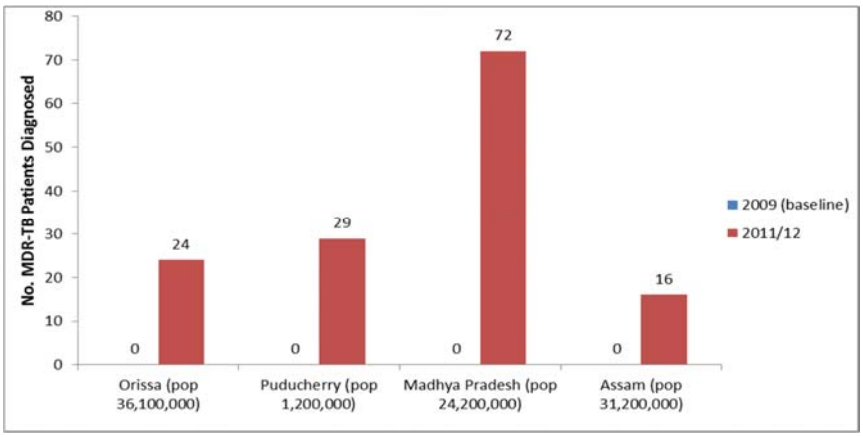
Objective 4: Effectively engage other providers and segments of society in TB control activities to support RNTCP goals and objectives.					
Activity	**OUTPUTS**	**TARGETS**	**EXPECTED DATE OF COMPLETION**	**STATUS AS OF SEPTEMBER 30, 2012**	**PROGRESS TO DATE**
Activity 4.1 Carry out transition activities for the PPM projects in Prakasam and Rangareddy Districts.	Report on the transition of PPM activities.	One report on the transition of PPM activities.	n/a	Completed	A workshop was held on May 2, 2012 to transition PPM activities and a detailed report has been submitted to USAID.

Objective 5: Support effective expansion of PMDT activities by identifying and addressing gaps in the DOTS Plus program.					
Activity	**OUTPUTS**	**TARGETS**	**EXPECTED DATE OF COMPLETION**	**STATUS AS OF SEPTEMBER 30, 2012**	**PROGRESS TO DATE**
5.1 Assess the readiness of new districts to commence PMDT activities.	Appraisal reports of DOTS Plus in ten districts.	Participate in central appraisal of DOTS Plus in ten districts.	Next reporting period	Ongoing	PATH staff participated in the DOTS Plus site assessment in Nashik, Maharashtra.
5.2 Support the establishment of PMDT Program Management Unit.	PMDT Program Management Unit in place at the CTD.	Support provided to one Program Management Unit.	n/a	Completed	Staff have been recruited to form the CTD PMDT Program Management Unit.

5.3 Support community care of MDR-TB patients to improve adherence and treatment completion.	Training module for health care workers on counseling MDR-TB patients developed.	Module developed.	n/a	Cancelled	The counselling training module is being developed by another partner.
5.4 Assess human resource needs and related management requirements to realize universal access and effective RNTCP integration with general health systems and the NRHM.	Phase 2 assessment report.	Phase 2 assessment report submitted to the CTD.	n/a	Completed	Initiatives Inc., in collaboration with PATH, completed the Phase 2 human resource assessment for the RNTCP. The assessment explored opportunities and constraints to integrating selected key RNTCP functions (namely financial management, procurement, and human resource contracting) with the general health system and evaluated the human resource implications of universal access.

Photos, Graphs, Tables

MDR-TB patients diagnosed by laboratories upgraded in the reporting period.



Four laboratories that PATH played a pivotal role in upgrading for LPA diagnosed a total of 141 additional MDR-TB patients who commenced treatment during the reporting period. Prior to the laboratory upgrades, MDR-TB diagnosis was not available in the project areas. Now upgraded, the four laboratories provide MDR-TB diagnostic services for a total population of 92.7 million. The progress in Madhya Pradesh can be attributed to the fact that a larger population is covered and the laboratory began functioning according to national standards before the other laboratories.

Laboratory workers are now able to safely diagnose more TB patients

Evaluation and Operations Research

Title	Purpose of study	Evaluation type and method(s)	PATH field contact	PATH DC contact	Partner	IRB status	Status/Results
Not applicable for this project.							

Deliverables

TO2015 FY09/10 Carryover India Work Plan					
Activty in FY09/10 Carryover India Work Plan	**Deliverable**	**Target Date of Completion**	**Status as of September 30, 2012**	**Name of file**	**Dissemination**
Objective 1: Provide technical support to laboratories in project areas, in addition to strengthening Intermediate Reference Laboratory (IRL) capacity to attain and maintain accreditation for culture and drug susceptibility testing (C&DST) by addressing gaps in infrastructure, planning, and management to complement PATH's technical support.					
1.1. Provide technical assistance for accreditation of selected IRLs	Lab accreditation assessment reports for each of the 10 IRLs.	May-13	Ongoing	Supervision reports.file	CTD, USAID
1.2. Provide management training and follow-up support for laboratory managers (Directors, State TB Demonstration Center-STDC) and microbiologists with the aid of existing partner training modules (PATH & FIND)	Workshop report from laboratory management training, including a list of the IRL staff that were trained	Apr-13	Delayed	Workshop will be conducted in next reporting period.	
1.3. Conduct situation analysis on External Quality Assurance (EQA) for sputum smear microscopy in four States	EQA situation analysis report	n/a	Cancelled		
1.4. Conduct experience-sharing workshops for IRL/NRL microbiologists & RNTCP consultants	Report on IRL experience sharing workshop	Dec-12	Ongoing	Workshop report - IRL Experience Sharing, Delhi, December 2011.	CTD
1.5. Lead the development of a validation protocol for Bio Safety Level-3 (BSL-3) laboratories	Draft BSL-3 validation protocol document	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
1.6. Participate in the National Laboratory Committee Meetings	National Laboratory Committee meeting report/s	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
1.7. Support infrastructure upgrades for laboratories	LPA and/or BSL-3 upgradation completion certificates from completed laboratories	May-13	Ongoing	IRL Dehradun completion certificate.	CTD, USAID
1.8. Support the installation of equipments at three laboratories	Equipment installation reports completion certificate for three labs	Apr-13	Ongoing	RMRI Completion Certificate.	CTD, USAID
Objective 2: Support expansion of airborne infection control in high-risk facilities and improve national capacity to provide high-level expertise on infection control.					
2.1.1. Facilitate supportive supervisory visits	Supportive supervision checklist tool	n/a	Cancelled		
	Reports from supportive supervision visits to implementing states	n/a	Cancelled		
2.1.2. Facilitate healthcare facility (HCF) risk follow-up assessments	35 follow up HCFRA reports	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
	Report on recommendations to revise guidelines	Apr-13	Delayed	Deliverable will be produced in next reporting period.	

2.1.3. Advocate to strengthen country commitment on airborne infection control	NAICC annual activity report	May-13	Delayed	Deliverable will be produced in next reporting period.	
2.2.1. Participation in governing committee meetings to plan, monitor, and guide the implementation of AIC measures in Maharashtra		September 30, 2012	Ongoing	Trip report - Maharastra governing committee meeting.	
2.2.2. Facilitation of sensitization workshop	Report on sensitization workshop for state IC committee and sub-committee members	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
2.2.3. Facilitate sessions of the capacity building workshop for facility Infection control (IC) focal points	Capacity building workshop report for facility IC focal points	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
2.2.4. Baseline and follow up facility risk assessments and dissemination workshop	Reports on baseline HCF risk assessment	n/a	Completed	Implementation of AIC in Maharashtra.	USAID, CTD
				Report Amravati – TB Hospital, Amrawati.	USAID, CTD
				Report Chest Hospital, Aund, Pune.	USAID, CTD
				Report Shashikala TB Hospital, Jaysinghpur, Kolhapur.	USAID, CTD
				Report TB Hospitals, Sewri, Mumbai.	USAID, CTD
	Reports on follow up HCF risk assessment	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
	Report from HCF risk assessment dissemination workshop	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
2.3.1 Conduct trainings for Engineers/Architects with the assistance of Partners in Health (PIH) and Centers for Disease Control & Prevention (CDC), and provide ongoing technical assistance to participants	Training report of Building Design & Engineering Approaches on AIC at national level	n/a	Completed	Trip Report - India, Ed Nardell, March 2012.	USAID, CTD
	Report on demonstration of high risk healthcare facility risk assessment			Agenda - Building Design and Engineering Approaches to Airborne Infection Control.	USAID, CTD
2.3.2. Develop module on Building Design and Engineering Approaches for AIC trainings in India	Module on building design and engineering approaches on AIC in India	Apr-13	Delayed	Deliverable will be produced in next reporting period.	

2.3.3. Create an Indian training resource group	List of members, training resource group.	n/a	Completed	AIC training participants list.	CTD
2.3.4. Develop a checklist for engineers/architects as a part of their building process in regard to AIC	Checklist for determining AIC compliance in new constructions and renovations	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
Objective 3: Provide technical support at national level in strategy development for Advocacy Communication and Social Mobilization (ACSM).					
3.1. Update National ACSM strategy document for RNTCP	Updated national ACSM strategy document	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
3.2. Develop operational handbook for ACSM at national level	ACSM operational handbook	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
3.3. Develop customized ACSM curriculum for capacity building on ACSM	Customized ACSM curriculum	Apr-13	Delayed	Deliverable will be produced in next reporting period.	
Objective 4: Effectively engage other providers and segments of society in TB control activities to support RNTCP goals and objectives.					
4.1. Carry out transition activities for PPM project in Prakasam and Rangareddy districts	Transition report on PPM pharmacy project	September 30, 2012	Completed	Report, PPM-Pharmacy Project transition.	USAID, CTD
Objective 5: Support effective expansion of PMDT activities by identifying and addressing gaps in the DOTS-Plus program.					
5.1. Assess the readiness of new districts to commence PMDT activities	Reports for each district appraisal that PATH has participated in.	n/a	Completed	Report - DOTS Plus Central Appraisal, Maharastra.	USAID, CTD
5.2. Support the setting up of Programmatic Management of Drug resistant TB (PMDT) program management unit:	Concept note for PMDT program management unit with clear roles and responsibilities defined for each partner role	n/a	Completed	Concept note framework, PMDT PMU.	USAID, CTD
	Approved Terms of reference of the PMDT program management unit	n/a	Completed		USAID, CTD
	Quarterly report of the PMDT program management unit	Apr-13	Delayed		
5.3. Support community care of MDR-TB patients to improve adherence and treatment completion	Finalized health worker PMDT training modules	Apr-13	Delayed		
5.4. Assess human resource needs and related management requirements to realize universal access and effective RNTCP integration with general health systems and NRHM	Report on service delivery HRH management situation and gap analysis for integration	September 30, 2012	Completed	HRH Assessment Phase 2 Report.	USAID, CTD
				HRH Assessment Design Phase 2.	
				HRH Assessment Phase 2 Data Collection.	
	Universal access staffing assessment report	November 30, 2012	Completed	Deliverable will be produced in next reporting period.	
	Job descriptions for affected staff	November 30, 2012	Ongoing	Deliverable will be produced in next reporting period.	

	Performance appraisal tools and procedures for RNTCP contractual staff	November 30, 2012	Ongoing	Deliverable will be produced in next reporting period.	
	Pilot design for an integrated RNTCP model	November 30, 2012	Ongoing	Deliverable will be produced in next reporting period.	
	Progress report on Initiation of an integrated RNTCP model in 2 to 5 districts	January 30, 2013	Pending	Deliverable will be produced in next reporting period.	
Trip reports	Trip reports	Ongoing	Ongoing	Trip reports - India, Tope Adepoyibi, November 2011, March 2012, September 2012	USAID

GeneXpert Procurement

Not applicable for this project.

Inventory

Date of purchase	Commodity	Work plan	Quantity	Serial number	Location
No commodities over $500 were procured during the reporting period.					

Success Story

Providing faster diagnosis and treatment for drug-resistant TB

"Patients go through a miserable journey while they're waiting to be diagnosed for multi-drug resistant TB (MDR-TB)," said Dr. Aparna B. Srikantam, the head of the microbiology division at the Blue Peter Public Health & Research Centre (BPHRC) Laboratory in Hyderabad, India. "First they're diagnosed with TB and taking their treatment. One day, they realize they're not responding to the treatment." Until recently, this could have meant months of uncertainty, more severe illness, or even death. The biosafety level II lab took three months to diagnose MDR-TB. "By the time the results came," Dr. Srikantam said, "often the patients would have already died, or patients had deteriorated and didn't respond to treatment." With USAID funding, PATH helped transform the first private-sector laboratory in India to become accredited in line with national and international standards. The Blue Peter Health & Research Centre Laboratory in Hyderabad was upgraded to BSL-3 and now has the ability to safely conduct liquid culture diagnostic tests (LPA). Staff can diagnose TB within days instead of months, while staying protected from potentially infectious samples. Last year, 68 MDR-TB patients died before they could access treatment. Since the upgrade, the laboratory has diagnosed more than 300 patients with drug-resistant TB, helped 250 TB patients begin treatment and follow-up, and now provides diagnostic and follow-up services for eight surrounding districts.

In May 2012, PATH continued this work and supported upgrades to clean rooms for facilitating LPA at IRL Dehradun, the first TB laboratory to have LPA technology in the state of Uttarakhand. The LPA laboratory's clean rooms were built per CTD, WHO, and CDC specifications to ensure quality and safety. The laboratory now provides advanced diagnostic services for the PMDT for a population of nearly 10.1 million people where these services did not exist before. PATH was part of a central appraisal team that

USAID-funded LPA at Dehradun.
Photo Credit: PATH

Successful transitioning of the PPM model to local government in Andhra Pradesh

In India, like many countries, people who fall ill seek care in a variety of settings, both public and private health facilities. Ensuring that people receive screening and speedy referral for TB diagnosis and treatment, no matter where they go for health care services is critical to saving lives and ensuring that private sector pharmacists like those working with PATH in Andhra Pradesh are able to provide services in line with national guidelines. Through a pilot public private mix project led by PATH in Ongole, Prakasam District, and implemented in collaboration with the district's Pharmacy Association, Drug Control Administration, and TB Control Society, 60 pharmacies have been trained on how to identify and refer those suspected of having TB and 110 pharmacists have been trained on referrals. They have also committed to cease over-the-counter sales of anti-TB drugs. As one pharmacist puts it, "*The training has expanded my knowledge and skills on how to identify chest symptoms and how to use the referral mechanism...and recently, a client returned and praised my referral. He expressed his gratitude for my advice which helped save his life.*" Since the project began, 152 chest symptomatics have been referred by 32 pharmacies in seven months, out of which 136 (90%) were evaluated, twelve were diagnosed with TB, and all were put on treatment. The project contributed to 5% of all chest symptomatics examined and 2% of the smear-positive TB patients diagnosed in the project area.
The project also mobilized pharmacists and local goverment to curb the sale of anti-TB drugs without a prescription. The Director General-Drugs & Copyright of the Drug Control Administration issued a circular emphasizing the importance of private pharmacists in expanding TB control services, and directed drug inspectors to monitor the sale of anti-TB drugs without a valid prescription. The circular also directs all medical shops to maintain records of anti-TB drug sales and to send periodic reports to the Drug Control Administration. To ensure sustainable gains, PATH has transitioned the two successful PPM pilot projects, in Ongole Municipal Corporation, Prakasam District, and Rangareddy District to local government authorities. The PPM model has been endorsed by key officials, and PATH conducted a transition workshop to familiarize state health officials with the model, using the PPM training guide. Dr. M. S. Srinivas Rao (State TB Officer, Andhra Pradesh) developed and shared a plan to scale up the project model throughout the state of Andhra Pradesh.

Andhra Pradesh State TB Officer transitioning the PPM project toward scale-up to the entire state.
Photo credit: PATH

Acronyms List

ACSM	advocacy, communication, and social mobilization
AIC	airborne infection control
ART	antiretroviral therapy
BSL-3	Biosafety Level 3
CDC	US Centers for Disease Control and Prevention
CTD	Central TB Division
DOTS	internationally recommended TB control strategy
DST	drug susceptibility testing
EQA	external quality assurance
FIND	Foundation for Innovative New Diagnostics
FY	Fiscal Year
HIV	human immunodeficiency virus
IRB	institutional review board
IRL	Intermediate Reference Laboratory
KIMS	Karnataka Institute of Medical Sciences
LPA	line probe assay
MDR-TB	multidrug-resistant tuberculosis
MOU	memorandum of understanding
NAICC	National Airborne Infection Control Committee
NIRT	National Institute of Research in Tuberculosis
NRHM	National Rural Health Mission
NRL	National Reference Laboratory
NSP	new smear positive
PGI	Postgraduate Institute of Medical Education & Research
PIH	Partners in Health
PPM	public-private mix
RNTCP	Revised National TB Control Program
SS+	sputum smear positive
TB	tuberculosis
TB/HIV	tuberculosis and HIV co-infection
USAID	US Agency for International Development
WHO	World Health Organization
XDR-TB	extensively drug-resistant tuberculosis