

Technical Proposal Application

Submitted to

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**International Union Against
Tuberculosis and Lung Disease**

Health solutions for the poor

Acronyms

ACSM	Advocacy, Communication and Social Mobilization
DOT	Directly Observed Treatment
DMC	Designated microscopy center
DOTS	Directly observed treatment, short-course
DST	Drug susceptibility testing
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human immunodeficiency virus
MDR-TB	Multi-drug-resistance tuberculosis
NGO	Non-governmental Organization
RNTCP	Revised National Tuberculosis Control Programme
TB	Tuberculosis
USAID	United States Agency for International Development
USEA	Union South East Asia Office
XDR-TB	Extensively drug resistant tuberculosis



Executive Summary

According to the World Health Organization, yearly there are approximately 9.27 million new cases of tuberculosis each year and 1.3 million deaths attributable to it, above all in the economically productive age groups of 15 to 59 years. Annually an estimated 0.5 million cases of multi-drug resistant tuberculosis are reported. Approximately 1.7 billion individuals worldwide are infected with *Mycobacterium tuberculosis*, and are at risk to develop tuberculosis during their lifetime. The regions most affected are Africa and Asia. In the last decade, TB cases have grown 20% worldwide with the highest burden in the most impoverished communities. India ranks first both in terms of the overall TB total numbers with 2 million TB cases and 131,000 MDR-TB cases (GTC 2009).

Human resources are the key to successful, high quality health services. It will be complicated to achieve RNTCP targets as well as the TB related Millennium Development Goals without well trained, dedicated and motivated health personnel. Health workforce development to strengthen both basic DOTS and scaling up management of M/XDR-TB remains crucial to ensure success of TB control. As part of the proposed project, The Union plans to implement 4 training courses on clinical/programmatic management on MDR-TB targeting clinicians; and 8 courses on leadership and management aimed at strengthening management capacities of key personnel involved in DOTS-plus programme implementation. These capacity building initiatives makes it possible for participants from many parts of the country to participate in sessions, and learn from leading experts in TB/ MDR-TB and management. The dissemination of knowledge, ideas, and information is expected to improve participant's scientific, programme implementation skills that will contribute to advancing TB and MDR interventions in their states and target populations.

The project also proposes to strengthen National Partnership for Tuberculosis control activities in India through partner agencies in engaging all care providers; and to promote involvement of media through conducting 8 workshops targeting media personnel. These interventions are intended to provide participants with key information regarding TB, MDR and help synergize stakeholder efforts for tuberculosis control in the country. Decreasing TB related mortality and reducing the burden of tuberculosis are goals which remain significant to the mission of The Union. The Union seeks funding from Eli Lilly India to the tune of US \$ 300,000 over 2 years to support project activities and address RNTCP related priorities on TB/MDR.



Background and rationale

Every year, nearly 2 million people die from tuberculosis, a curable disease. Poor adherence to the necessary drug regimen and interrupted treatment are widespread problems in resource-constrained countries. These problems not only keep patients from being cured of the disease but also can lead to multi-drug resistant strains of TB, which require even longer and more complex treatment. Conservative estimates indicate that about 500,000 new cases of MDR-TB arise every year, and that the average person with the disease infects up to 15 other people during his or her lifetime. Clearly, this pandemic requires a massive mobilization of people and resources to address this issue.

The global challenge of multidrug resistant tuberculosis (MDR-TB), and more recently, extensively drug resistant-tuberculosis (XDR-TB), has attracted increasing attention and resources in recent years. As a result, many countries are embarking on treatment programs for drug-resistant tuberculosis within their National Tuberculosis Program (NTP) activities. However, the knowledge and skills required to effectively implement treatment programs for drug-resistant tuberculosis remains insufficient in many countries. Furthermore, capacity building initiatives for health workers addressing this important area have not kept pace with the increase in resources available for treatment activities.

India is highest TB burden country in the world, accounting for nearly one-fifth of the global incidence. In 2007, out of the global annual incidence of 9.23 million TB cases, 1.96 million were estimated to have occurred in India, of whom 0.8 million were infectious cases. This scenario which has persisted for a number of decades, now faces further threats from co-infection with HIV (5% of the new TB cases are estimated to be HIV Positive) and the emergence of Multi-drug resistance (MDR) tuberculosis (3% of new cases and 12% -17% of previously treated cases are estimated to be MDR-TB). This estimates to approximately incident 131,000 MDR-TB cases in the country.

The Revised National TB Control Programme (RNTCP), based on the internationally recommended Directly Observed Treatment Short-course (DOTS) strategy, was launched in 1997 and expanded across the country in a phased manner. Full nationwide coverage was achieved in March 2006 covering over a billion populations (1114 million) in 632 districts / reporting units. Under RNTCP, when compared to the pre-RNTCP era, treatment success rates have tripled from 25% to 86% and TB death rates have been cut 7-fold from 29% to 4% presently. Since its inception, the programme has initiated nearly 11 million patients on treatment, thus saving more than 1.9 million additional lives. The programme has consistently maintained the treatment success rate >85% and new sputum positive (NSP) case detection rate close to the global target of 70%. From 2007 onwards, RNTCP has also achieved the NSP case detection rate of more than 70% in line with the global targets for TB control.

For addressing the challenge of MDR-TB, RNTCP has initiated DOTS-Plus services since 2007. Under DOTS-Plus, RNTCP is in the process of establishing a network of 43 accredited Culture and Drug Susceptibility testing laboratories (DST) across the country in a phased manner for diagnosis and follows up of MDR TB patients. DOTS Plus services for management of MDR TB have been rolled out in the states of Gujarat, Maharashtra, Andhra Pradesh, Haryana, Delhi, Kerala, West Bengal, Tamil Nadu, Rajasthan and Orissa. In order to support RNTCP in expanding the DOTS-Plus programme across the country and to ensure that the quality of services are maintained, The Union is proposing to implement diverse activities through the financial support from Elly Lilly (Annex 1).



Proposed Activities

The primary objective of this activity is to expand the reach of 'Union MDR courses' to health professionals in India so as to impart knowledge and skills to clinicians to effectively manage cases of drug-resistant tuberculosis, especially MDR-TB. In addition, the course will also introduce participants to the challenges/threat posed by Extensively Drug Resistant (XDR)-TB. The course will introduce the approaches to treatment of drug-resistant tuberculosis from a program perspective.

Intervention 1: Building Capacity of Physicians/Medical and Health Professionals on clinical, programmatic management of Multi Drug Resistant-TB in India; Training courses targeting clinicians during Year 1 and 2

Training in MDR-TB for specialist physicians in medical colleges in the country – will start with a limited number in the 8 pilot states, using the Union model for training and building capacity in the country. The training will be additional to that organised through the RNTCP, and will also target specialist physicians working in medical colleges that are not yet DOTS Plus sites. The RNTCP programme guidelines will be the bench mark for this training course.

1.1 Goals

- To update the knowledge regarding all aspects of the management MDR/XDR-TB, with special focus on diagnosis and treatment.
- To reason with them the practical applicability of this knowledge and to achieve an appointment to follow the rules of the RNTCP MDR-TB Guidelines.
- To identify the best Specialist Physicians working in MDR/XDR-TB in India to assist RNTCP in reproducing this model of training in all the States and areas of the country and to act as reference.

1.2. Learning objectives for course participants

After completing the course, participants should be able to:

- Describe the current global epidemiologic situation of drug resistant tuberculosis
- Describe the biologic characteristics and conditions of *M. tuberculosis* growth and the nature of resistance of the organism to anti-tuberculosis medications
- Review the different approaches to case finding for drug resistant tuberculosis and the prioritization of these approaches in different settings
- List the strengths and weaknesses of various diagnostic approaches for MDR/XDR-TB, including the value and limitations of drug sensitivity testing for various first- and second-line anti-tuberculosis medications
- Explain the principles of MDR/XDR-TB treatment, including numbers of drugs, duration of treatment, and individualized versus standardized treatment approaches
- Describe the mechanism of action of the main anti-tuberculosis medications available for MDR-TB treatment
- Recognize the most common adverse reactions to second-line anti-tuberculosis medications and list their appropriate management
- Review the management of MDR-TB in special populations, such as HIV co-infection and pregnancy
- Analyse the drug resistance problem in a given setting to determine the best treatment approach for a National Tuberculosis Programme
- Discuss the common challenges and potential solutions for managing drug resistant tuberculosis from a programmatic perspective



1.3. Methodology

The 3-day intensive training course consists of presentations, discussions and practical exercises provided by internationally renowned experts in the field of drug resistant tuberculosis. The in-class activities will use a format of lectures and interactive learning. The course will provide a detailed review of epidemiologic, biologic, clinical, laboratory and programmatic components of drug resistant tuberculosis. The in-class activities will be supplemented by field visits to laboratory and clinical settings where activities related to drug resistant tuberculosis are being implemented.

The existing knowledge on each specific topic of the course is updated, at the maximum scientific level, and the aspects to be applied operatively are dealt with. In each topic, 60% of the available time is dedicated to maximally update the subject dealt with, thereby satisfying the wish for knowledge of the specialist, while 30% is dedicated to discussing with the attendants the part of the analysed knowledge which can be operatively applied in India. Lastly, the remaining 10% of the duration of the subject is used to reach concrete action agreements with the participants regarding each of the topics examined. As a special rule, the next topic is not dealt with until the entire group agrees on the aspects presented on each subject.

The material of the course will be prepared by the faculties of The Union in consultation with the Central TB Division and its technical partners. The course will be conducted in English.

1.4. Target audience

The maximum number of attendance will be 25, and these participants must be adequately selected. They must fulfil two important conditions: specialist physicians working with TB and or MDR-TB patients and they will be nominated by the programme and /or its partners.

1.5 Outcomes

- Programme guidelines are uniformly adhered to by specialist physicians in teaching institutions in the country
- A pool of resource created in the country to support RNTCP in the MDRTB Programme expansion
- MDRTB and the principles of its programmatic management are taught by the teaching faculties in these Medical Colleges

1.6 Work Plan

The detailed work-plan will be developed in consultation with the Central Tuberculosis Division. However the tentative plan is as follows:

Year 1: 2 Master trainers training courses during July 2010 – December 2011



Intervention 2: Building Capacity of Health Professionals implementing DOTS plus activities on 'Leadership and Management'; Training courses targeting RNTCP personnel during Year 1 and 2

The course will be developed using the Union model for strengthening management and leadership skills of health personnel. The overarching objective of this course will be to provide participants with a working knowledge on all basic aspects of leadership and management that relate to TB control in order to build their capabilities and to apply this knowledge in their work at the national, state and district levels. It is designed to improve the management skills of participants. The course that will be developed in close consultation with the RNTCP programme will focus on basic elements of MDR TB, leadership and managerial roles, partnership building, team building and motivation, budgeting and financial management

2.1 Goals:

To provide knowledge on leadership and management to a pool of doctors and health care workers.

2.2. Learning objectives for course participants

After completing the course, participants should be able to:

- Describe the current global epidemiologic situation of drug resistant tuberculosis
- Improved management and leadership skills, personal effectiveness and managerial skills
- Recognize the elements of partnership building
- Improved communication and budgeting skills

2.3. Methodology

The 7 days intensive training course consists of presentations, discussions and practical exercises provided by internationally renowned experts in the field of leadership and management. The course will provide basic elements of MDR TB, leadership and management, team building and motivation and financial management

2.4. Target audience

The maximum number of attendance will be 25, and these participants must be adequately selected.

2.5 Outcomes

A pool of resource created in the country to support RNTCP in managing the programme

2.6. Plan

2 Training courses during June 2010 to December 2011



Support through Partnership for TB Care and Control, India

Background

The “Partnership for Tuberculosis Care and Control in India” (the Partnership) brings together civil society across the country on a common platform to support and strengthen India’s national TB control efforts. It seeks to harness the strengths and expertise of partners in various technical and implementation areas, and to empower affected communities, in TB care and control. The Partnership evolved out of a consensus meeting of 44 leading civil society organisations held in New Delhi in November 2008, and consists of technical agencies, non-governmental organizations, community-based organizations, affected communities, the corporate sector, professional bodies and academia. The Partnership activities are overseen by a steering committee supported by a secretariat housed in The Union. As of now 32 partners have signed MoA while there are also a large number of partners that continue to be associated with the Partnership and regularly attending meetings.

The overarching objective of this initiative is to bring together and synergise civil society contribution to TB care in the country, and progress towards achieving the goals of the Global Plan to Stop TB 2006-2015 and the relevant MDGs. The Partnership intends to support underperforming states and districts to uniformly achieve the global targets of 85% treatment success and 70% detection rates, reduce delays in diagnosis and treatment initiation, and strive for the implementation of Patient Centred Care for all TB patients, including those with MDR-TB and TB-HIV. All these activities would be undertaken in alignment with national strategy to complement RNTCP efforts.

Over the long term, the Secretariat seeks to support the development of a combined strategic plan for partners to support the fight against TB in India, coordinate TB related activities, increase visibility and ownership of the national TB program, facilitate need based technical and financial support for partners, interface with donors, and expand its membership.

Challenges and Opportunities: Challenges in target districts include engaging the largely untapped private health sector, the rapidly growing industrial sector with a reachable workforce, and successful initial efforts to coordinate TB and HIV services. The ongoing TB ACSM project of World Vision funded by USAID/India presents an opportunity to address some of these challenges in the most underperforming states and districts of the country, and provide a jumpstart to potential GFATM R9 project. However results of GFATM R9 application will take time and even in case of a successful proposal, may take several months before implementation begins. The limited scope of activities supported during the extension phase of USAID project, will only underutilize the potentiality of the Secretariat and the Partnership leading to missed opportunities for contribution to India’s TB care and control efforts. This Partnership has come into existence with lot of efforts from the Secretariat and the technical guidance provided by the Union, National Programme Division and other technical partners. This Partnership could be visible, build the capacity of Partners and engage the Partners in this Partnership initiative if the scope of work is expanded. **Intervention 3 and 4 will be implemented in close coordination with partner agencies of the National Partnership.**



Intervention 3: Engaging all care providers, specifically informal providers such as traditional health providers (traditional healers, quacks, non-medical providers) in the basic DOTS

The overarching objective will be to sensitize all care providers and enhance their contribution to RNTCP within their target populations. The sensitization events will provide participants with a basic knowledge on tuberculosis in order to build their capabilities and to apply this knowledge in their work at service delivery level for suspect referrals and DOTS provision. In consultation with implementing partners of the National Partnership, capacity building or sensitization events of private healthcare provider's i.e. traditional healers, alternative medicine, quacks, etc on TB and its related activities will be implemented in selected block/districts of 4 states: Maharashtra, Punjab, Karnataka and Tamil Nadu.

3.1 Goals:

To engage the largely untapped informal private healthcare providers and help them enhance their capacity and establish effective linkages among the programme, traditional healers and NGOs. These trained providers would then act as a DOT provider and refer TB suspects to DMCs.

3.2. Learning objectives for participants

After completing the course, participants should be able to:

- Understand the basic elements of RNTCP
- Discuss the common challenges and potential solutions for identification and referral of suspects to the public health facilities

3.3. Methodology

The 2-day sensitization events will consist of sessions covering basic elements of DOTS and advocacy followed by inter-active discussions by resource persons from implementing partners and RNTCP programme personnel.

3.4. Target audience

The target audience will be defined following selection of districts and provider mapping by partner agencies.

3.5 Outcomes

- Sensitization of informal/formal health care providers at district or block levels
- Enhanced participation of informal/traditional healers and all care providers in RNTCP
- Become advocate for the TB programme at the District level

3.6 Indicators:

- Number of practitioners of informal health providers, quacks and traditional healers trained

3.7. Time Frame: 4 trainings per state (16 trainings total) by June 2010- December 2011



Intervention 4: Building Capacity of Partners on Media engagement and Sensitizing Media on RNTCP and TB care and control in India; Targeting Partner agencies and Media during Year 1 and 2

The overarching objective of this training will be to bring together media representatives within civil society and technical partners to provide the latter basic skills on how to engage the media and provide it with relevant inputs and, conversely, to sensitise the media on RNTCP and TB control in India towards strengthening constructive coverage of TB in the media.

4.1 Goals

- To build the capacity of our Partners on engaging the media, and on providing them with relevant inputs such as story ideas and communiqués.
- To sensitize local and vernacular media on TB care and control in India through regional meetings.

4.2. Learning objectives for course participants

After completing the course:

- Partners would know about media advocacy skills and be able to provide them with inputs and ideas that allow better coverage of TB in the region.
- Media representatives would get familiar with the essential knowledge on TB care and control in India, including RNTCP, DOTS and the emerging challenges like drug-resistant TB and TB-HIV co-infection, and be able to strengthen reportage on TB towards contributing to TB control in the country

4.3. Methodology

The training course would consist of presentations, discussions and hands-on exercises facilitated by resource persons from the programme at State and District level, technical agencies and the media. 4 trainings will be conducted (1 training for 2 days for Partners and one day for Media representatives per region).

4.4. Target audience

The number of participants is envisaged to be about 25 partners and 25-30 media representatives per region, adequately selected from the mainstream and vernacular media

4.5 Outcomes

- 25 Partner organizations in each region trained on how to engage the media in the programme
- 25-30 media representatives trained at each of the regional trainings

4.6 Indicators

- Number of organizations trained on media use in their program
- Number of media representatives trained on TB and RNTCP
- Number of media write ups/articles on TB related activities following the training

4.7 Time Frame

4 training courses during June 2010 – December 2011



Annex 1: Gantt chart

Project activities									
		YEAR 1				YEAR 2			
	Intervention	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
1	MDR-TB training courses				2 courses				Project documentation and Evaluation
2	Leadership and management courses			1 course			1 course		
3	Engaging all care providers								
4	Partner and Media courses	Planning		1 course	1course		1 course	1 course	



Annex 2: Project budget



Budget Estimate for Eli Lilly Proposal

Particulars	No. of units	Cost per unit (US\$)	Total Cost (US\$)
PERSONNEL			
Sub total			15,835
PROJECT ACTIVITIES/TRAININGS			
Trainings			
A. Building Capacity of Physicians/Medical and Health Professionals on clinical and programmatic management of Multi Drug Resistant - TB in India.	2	31,076	62,152
B. Training in Leadership and Management for personnel (doctors and health workers) in the current DOTS Plus sites in the country.	2	42,554	85,109
C. Training for traditional health providers (traditional healers, quacks, non-medical providers) in the basic DOTS.	16	4,574	73,183
D. Training for Partners on media engagement and sensitising media on RNTCP and TB Care and Control in India.	4	9,213	36,852
Sub total			257,296
OTHER EXPENSES			
Other operational costs	1	26,630	26,630
(This covers general administration expenses which includes communication, local travel, stationery, printing, insurance, repair & maintenance of equipments, audit etc.)			
Sub total			26,630
Total			\$299,761