National Tuberculosis Program
Lao PDR
Action Plan
General information

- Lao PDR is a land locked country
- Surface: 236,800 sq.km
- Population: 5,6 million (22.3 inh/sq.km)
- 2/3 of the terrain is mountainous
- The major occupation of people is agriculture
- 18 provinces, 142 districts

Health status:
- 3 Central Hosp.
- 4 Regional Hosp.
- 18 Provincial Hosp.
- 142 Districts Hosp.
- 703 HCs
Epidemiology of TB

TB is a major public health problem

ARI : 1.2 % (Tuberculin survey in 1995)

180 new TB cases / 100,000 est. incidence

About 72 new TB cases per year of them being infectious (72 new S+ / 100,000)
DOTS Coverage 1995-2005

- Province
- District
- Health center

The chart shows the number of cases detected (NS+) over the years from 1995 to 2005. The number of cases generally increases over time, with a significant rise in the latter years. The percentage of cases detected (CDR NS+) also shows an upward trend, peaking in 2005.
## Treatment success rate of new s+ (1995-2005)

<table>
<thead>
<tr>
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<tr>
<td>Cured</td>
<td>62.4</td>
<td>65.5</td>
<td>74</td>
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<td>79</td>
<td>72</td>
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<td>Completed</td>
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<td>8.5</td>
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<td>8</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>7</td>
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<tr>
<td>Defaulted</td>
<td>19</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>11</td>
<td>9</td>
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<td>Transfer Out</td>
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<td>9.6</td>
<td>3</td>
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</table>
Treatment success rate of new smear + 1995-2005

Success rate
Died rate
Defaulted rate
## Stakeholder Analysis

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Beneficiaries</th>
<th>Potential Opponents</th>
<th>Implementing Agencies</th>
<th>Decision Makers</th>
<th>Funding Agencies</th>
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<tr>
<td>Lao people</td>
<td>Lao people</td>
<td>Shamans</td>
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<td>Gov. of Lao PDR</td>
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<td>Patients</td>
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<td>MOH</td>
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<td>GF</td>
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<td>workers</td>
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<td>H.Ws</td>
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<td></td>
<td>VHV</td>
<td></td>
<td></td>
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<td>Program</td>
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<td>TB treatment</td>
<td></td>
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<td>manager</td>
<td>Program</td>
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<td>supporters</td>
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</table>
- Problem analysis

TB burden in Lao PDR is increased

- Annual risk of TB infection is increased
  - (Direct effects)

- No of TB morbidity is increased

- Low rate of treatment success of smear + TB
  - (Core problem)

- High defaulted rate (1)
- High death rate (2)
- Laboratory activities are Not functioning properly in some area (3)
  - (Direct causes)
**Problem analysis**

- High defaulted rate
  - Poor defaulter tracing mechanism
    - Insufficient counseling skills for health workers
    - Insufficient perdiems for health workers to trace defaulted patients
    - Lack of transport in some Provincial & Districts DOTS units
  - Case holding activities are not done properly in some area
    - Unqualified TB staff at some level
    - Insufficient training for newly hired TB staff
    - Work over loaded for TB staff
Problem analysis (2)

High death rate (2)

- Patients misunderstand the length of TB treatment
- Poor knowledge of TB for TB patients
- HWs did not Give H.E on TB Sufficiently to Patients
- TB / HIV cases are increased
- Pilot area is limited
- Patient's delay on treatment
- Patients are not aware of TB center service
Problem analysis (3)

**Laboratory activities are not functioning properly in some area (3)**

- Unqualified TB laboratory staff at some levels
- Insufficient Training for Newly hired TB laboratory staff
- Lack of equipment at some levels
Objective analysis

TB burden in Lao PDR is decreased

Annual risk of TB infection is decreased
No of TB morbidity is decreased

( Core objective )

High rate of treatment success of smear + TB

( Direct ends )

( Direct means )

Low defaulted rate (1)
Low died rate (2)
Laboratory activities are improved (3)
Low defaulted rate (1)

- defaulter tracing mechanism are improved
  - sufficient counseling skills for health workers
  - Provide sufficient perdiems for health workers to trace defaulted patients
- Case holding activities are improved
  - Provide transport to Provincial & Districts DOTS units where lacking
  - Qualification of TB staff are improved
  - Work over Loaded for TB staff is reduced
  - Provide sufficient training for newly hired TB staff

( Direct means )
Objective analysis (2)

Low death rate (2)  (Direct means)

- Patients understand the length of TB treatment
- Knowledge of TB for TB patients is improved
- HWs give H.E on TB sufficiently to TB patients

- TB / HIV cases are decreased
- Expand TB / HIV pilot project to other area

- Patients start the treatment on time
- Patients are aware of TB center service

(Indirect means)

Expand TB / HIV pilot project to other area

(Indirect means)
Laboratory activities are improved (3)

- The qualification of TB laboratory staff are improved
  - Provide sufficient training for newly hired TB laboratory staff
  - Provide equipment to some levels where lacking

(Direct means)
- Decreasing defaulted rate approach

**Low defaulted rate (1)**

**Defaulter tracing mechanism are improved**
- Provide sufficient counseling skills for health workers
- Provide perdiems for health workers to trace defaulted patients
- Provide transport to Provincial & Districts DOTS units where lacking

**Case holding activities are improved**
- Qualification of TB staff are improved
- Provide sufficient training for newly hired TB staff
- Work over loaded for TB staff is reduced
Decreasing death rate approach

Low death rate (2) [Direct means]

- Patients understand the length of TB treatment
- Knowledge of TB for TB patients is improved
- HWs give H.E on TB sufficiently to TB patients
- TB / HIV cases are decreased
- Expand TB / HIV pilot project to other area
- Patients start the treatment on time
- Patients are aware of TB center service

Direct means:

- Decreasing death rate approach
Laboratory activities are improved (3)

- The qualification of TB laboratory staff are improved
  - Provide sufficient training for newly hired TB laboratory staff
- Provide equipment to some levels where lacking

( Direct means )
# Project selection

<table>
<thead>
<tr>
<th></th>
<th>Decreasing defaulted rate approach</th>
<th>Decreasing death rate approach</th>
<th>Improving laboratory activities approach</th>
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<td>TB patients Project manager</td>
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<td>Project coordinator</td>
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<td>NTC staff, PTCs, DTMss VHVs</td>
<td>NTC staff, PTCs, DTMss VHVs</td>
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<td>Difficult</td>
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<td>Cost of : Stationeries, printing existing IEC material (poster, brochure)</td>
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<td>Check list quest. new cars, new motorbikes</td>
<td>Cost for expanding TB/HIV pilot project to other area</td>
<td>new microscopies</td>
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<td><strong>Policy priorities</strong></td>
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<td><strong>Feasibility</strong></td>
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<td><strong>sustainability</strong></td>
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Action Plan

- **Project name**: Increase the rate of treatment success of new s+ TB
- **Target area**: Lao PDR
- **Target group**: TB patients
  - Project manager
  - Project coordinator
  - NTC staff
  - PTCs
  - DTMss
  - VHVs
Overall Goal

TB burden in Lao PDR is decreased

Verifiable indicator
ARI of TB is reduced from 1.2% to 0.8% by the end of 2009

Means of verification
Result of tuberculin survey.

Important assumption
The TB control policy of the MOH remains unchanged
Project purpose

Defaulted rate of new s+ TB is decreased from 9% to 3% by the end of 2009

Verifiable indicator

Means of verification

Quarterly performance cohort report

Important assumption

The political commitment at provincial and district level continues
Outputs

- Defaulter tracing mechanism is improved
- Case holding activities are improved
Output(1): **Defaulter tracing mechanism is improved**

- **Verifiable indicator**
  Percentage of defaulted cases traced by HWs is increased from 40% to 80% by the end of 2009

- **Means of verification**
  - interview result from the supervision visits

- **Important assumption**
  - The donor support the project sufficiently
Output(2): Case holding activities are improved

- **Verifiable indicator**
  Percentage of district performing adequate monitoring is increased from 80% to 100% by the end of 2009

- **Means of verification**
  data from statistic checking system
Output(1): Defaulter tracing mechanism is improved

- **Activities**
  1. Provide sufficient counseling skills for DTM{s and VHVs
  2. Provide sufficient perdiems for DTM{s and VHVs to trace defaulter pts
  3. Provide transport to provincial and districts DOTS units where lacking
  4. Conducting interview to identify defaulted tracing situation during the supervision visits
Case holding activities are improved

- **Activities**
  1. Provide training courses to DTMs and VHVs to improve their qualification.
  2. Discussion and advice given to PTCs regarding the work sharing to reduce the work overloaded for DTMs and Village Health Volunteers.
Output(1): Defaulter tracing mechanism is improved
Act.(1): Provide sufficient counseling skills for DTM and VHVs

1.1 NTC staff and PTCs provide training courses to DTM
1.2 PTCs provide training courses to VHVs
1.3 NTC staff conduct superv. visits to evaluate the performance of DTM and VHVs after giving training courses
Output(1): Defaulter tracing mechanism is improved

Act.(2): Provide sufficient perdiems for DTM's and VHVs to trace defaulter patients

2.1 NTC provide perdiems to District DOTS units for tracing defaulter pts.

2.2 NTC provide perdiems to HC DOTS units for tracing defaulter pats.
Output(1): Defaulter tracing mechanism is improved
Act.(3): Provide transport to provincial and
districts DOTS units where lacking

3.1 NTC provide 4 cars (4 x 4 pick - up) for 4 provinces where lacking
3.2 NTC provide 60 motorbikes for 60 districts DOTS units where lacking
Output(1): Defaulter tracing mechanism is improved
Act.(4): Conducting interview to identify defaulted tracing situation during the super. visits

4.1 PTCs interview DTM about the proportion of defaulted cases traced by HWs in the dist. hosp. during the super. visits

4.2 DTM interview VHVs about the proportion of defaulted cases traced by HWs in the HCs during the super. visits
Output(2): Case holding activities are improved
Act.(1): Provide training courses to DTMs and VHVs to improve their qualification

1.1 NTC staff and PTCs provide training courses to DTMs.
1.2 PTCs conduct training courses to VHVs.
1.3 NTC staff conduct superv. visits to evaluate the performance of DTMs and VHVs after giving training courses.
Case hold. activities are improved
Act.(2): Discus. and advice given to PTCs regarding the work sharing to reduce work overloaded for DTM and VHVs

2.1 PTCs interview each staff about the work overloaded in the distr. Hosp. to distribute the work for DTM to reduce the work overloaded

2.2 DTM interview each staff about the work overloaded in the hcs to distribute the work for VHVs to reduce the work overloaded
**Inputs**

- **Personnel:**
  - Project manager
  - Project coordinator
  - NTC staff
  - PTCs
  - DTM
  - VHVs

- **Equipment:**
  - Stationeries for trainer and trainees
  - IEC material (poster, brochure)
  - Check list for questionnaire to interview
  - 4 cars (4 x 4 pick-up) for 4 provinces where lacking
  - 60 motorbikes for 60 districts DOTS units where lacking (1 motorbike for 1 districts).

- **Donor:**
  - Global Fund
  - DFB
- **Important assumption**
  
  - Trained HWs continue to work for their communities
  - The collaboration and support from several concerned such as: NTP, PH Depart., DH Office, staff, fund continues

- **Precondition**
  - Partner agency does not oppose the project