National Tuberculosis Programme
NEPAL

Annual Report

FY 2068/69 (2011/12)

Government of Nepal
Ministry of Health and Population
Department of Health Services
National Tuberculosis Centre
Thimi, Bhaktapur

Government of Nepal
Ministry of Health & Population

Phone: 4. 262987
262590
262802
262706
262935
262862

Ramshahpath, Kathmandu
Nepal

Ref: .....

Date: .....

Message

Tuberculosis (TB) remains one of the major public health problems in Nepal. Government of Nepal is committed to fight against Tuberculosis, and it has given the status of priority one programme and endeavourers to make available all resources necessary for the National Tuberculosis Control Programme (NTP)

National TB Programme is a permanent and continuous part of the Ministry of Health & Population and its services are available throughout the country. New Stop TB is the strategy for TB Control in the country. Nepal has achieved both the Global target of Tuberculosis i.e. 70% case finding and approaching treatment success rate of 90%. Government of Nepal is committed to sustain and improve the achievement and improve access through effective coordination and collaboration with community, private sectors, I/NGOs, donor agency and other stakeholders and partners.

I am pleased to see the Annual Report of National Tuberculosis Programme for the Fiscal year 2068/69 (2011/2012). It is a crucial document for programme monitoring and evaluation of the programme and a useful reference for all those involved in the fight against Tuberculosis including national level planners, implementers and researchers.

Government of Nepal has initiated free health care services at Sub Health Post, Health Post, Primary Health Center and District Hospital level in an effort to make basic health services availability to the citizens of the country as per the Interim Constitution of Nepal. In this context, Tuberculosis Control Programme is a model for delivering free health care services for new Nepal up to the sub health post level in order to provide full coverage and access.

I would also like to extend my sincere appreciation and thanks to all the development partners and others governmental and non governmental sectors for their valuable contributions for TB control in Nepal.

Vidyadhar Mallik
Minister for Federal Affairs,
Local Development, Health & Population
Government of Nepal

March 2013

Government of Nepal
Ministry of Health & Population

Phone: 4. 262987
262590
262802
262706
262935
262862

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Message

National Tuberculosis Control Programme is recognized as a high priority and exceedingly successful programme by the Government of Nepal. It is focused to provide quality assured services and ensure universal access through DOTS treatment and sub treatment center based within the primary health care system of the Ministry of Health & Population.

It is a matter of pride that National TB Programme has already achieved one of the Millennium Development Goal and I am confident that it will be able to achieve all targets by 2015. However sustaining these achievements and to make further progress still remains challenges.

Government of Nepal is committed to control tuberculosis and it recognizes National TB Programme as one of the top priority programme within the Ministry of Health & Population. National TB Programme is a top performing programme within the country but also recognized as model in the South Asia.

With adoption of STOP TB Strategy in 2006 NTP has embarked on a new era for tuberculosis control under which several new initiatives have been launched successfully including Drug Resistant TB management programme and is considered a global model for ambulatory treatment.

I would also like to take this opportunity to acknowledge and extend my sincere thanks to all the development partners for their support for the prevention and control of tuberculosis and hope that this crucial support will remain available to the programme in the future as well.

Last but not least, I like to congratulate to all the health personnel working at all levels including Female Community Health Volunteers for their contribution to tuberculosis control programme in Nepal. I also like to extend my sincere appreciation to I/NGOs, CBOs, Communities and Private Sectors and other stake holders for their valuable assistance in effective management of DOTS programme.

Dr. Praveen Mishra
Secretary
Ministry of Health & Population
Government of Nepal

March 2013

Government of Nepal
Ministry of Health & Population
DEPARTMENT OF HEALTH SERVICES
(.....)

Tel. : 4261436
: 4261712
Fax : 4262238

Pachali, Teku
Kathmandu, Nepal

Ref. No.

Date:-.....

Message

The Department of Health Services has been successful in addressing the challenge of Tuberculosis in the country through National Tuberculosis Programme (NTP) which has made remarkable progress since the introduction of DOTS in 1996.

National TB Programme has achieved both global targets for TB control and also some of the targets set for Millennium Development Goal. However, there are several critical challenges which need to be addressed namely, improving the accessibility of TB services to the poor and vulnerable population groups, delivery of TB services in remote areas, expansion of collaboration with private health care providers, promotion of International Standards of TB Care, address the issues of TB/HIV and DR TB.

The Department of Health Services is fully committed to address these challenges through continued commitment, effective collaboration with all sectors, civil societies, I/NGOs, donor agencies, community, private sectors, volunteers, all partners and individuals involved in TB control activities.

It is with great pleasure to release the National TB Programme Annual Report 2068/69 (2011/2012). This important publication documents the progress made by NTP, provides detailed statistical analysis of programme information against its targets and indicators. I hope this reports will help organizations and individuals involved in TB control to design policy and in the preparation of plan of action for effective TB Controlled programme.

Finally, I would like to appreciation and thank the Director of National Tuberculosis Center and the team for all their work in bringing out this publication in time.

Dr. Mingmar Gyelzen Shrepa
Director General
Department of Health Services
Government of Nepal

March 2013

Government of Nepal
Ministry of Health & Population
Department of Health Service
National Tuberculosis Centre
Thimi, Bhaktapur, Nepal
(..... Section)

☎ 6630706
6630033
Fax: 977-1-6635986
E-mail: ntpdirector@mail.com.np

Government of Nepal
Ministry of Health & Population
Department of Health Service
National Tuberculosis Centre
Thimi, Bhaktapur

Ref. No.

Date .....

Message

The National TB Center (NTC) takes pleasure to publish Annual Report 2068/2069 (2011/2012) of the NTP on the occasion of the World TB day, March 24th 2013. The aim of this report is to analyze critically progress made by the programme at all levels and at a same time find out the possible weakness so that can be overcome in future in programme implementation.

National TB Programme of Nepal has made exemplary progress since adoption of DOTS strategy in 1996. However, tuberculosis still remains a major public health problem in Nepal. National TB Programme is priority one programme of Ministry of Health & Population however; greater commitment by Government is needed to fight TB. Similarly, greater commitment by donors is also required to finance the new STOP TB Strategy, which has been adopted by the Ministry of Health & Population in order to provide more comprehensive TB control measures.

Directly Observed Treatment Short course (DOTS) based services are available through 1141 treatment centers, 3110 sub-treatment centers in the country, while 533 microscopy centers are providing TB diagnostic services. NTP has consistently achieved both global targets for TB control including 73% case detection and nearly 90% treatment success rates. DOTS plus programme for treatment of Drugs Resistance TB (DR TB) started in September 2005 with approval from of Green Light Committee (GLC) of WHO. By July 2012, 1221 DR TB cases have been registered for treatment through 12 treatment centers and 65 sub-centers. NTP has also started treatment to Extensively Drug Resistant TB (XDR) cases since 2010 with 46 registered cases till the date. Practical Approach to Lung Health (PAL) has been piloted, gradually expanded to 14 districts and will be implemented to remaining districts in phase wise manner.

This report is an outcome of the various activities carried throughout the country. The recording, reporting and verification of NTP data is done at the Treatment Centers and detailed statistical analysis of NTP indicators and issues, then presented and discussed during planning and review meeting at various level (District, Regional, National). NTP Annual Report also documents the valuable contributions of National TB Programme partners and their inputs which have been instrumental in achieving the goal and targets of this successful programme. This report also serves as a working tool for health workers at all levels and provides good reference of National and International scientific committees, students and partners of Nepal NTP. This report is the product of the hard work of the entire health workforce involved in the NTP.

Furthermore NTP is categorically focusing efficient resource mobilization and coordination among partners to detect and cure missing TB cases as per its strategic plan in the years to come.

I would like to extend my sincere appreciation and thanks to all partners: WHO, GFATM, LHL, IUATLD, SAARC TB/HIV & AIDS Center, BNMT, FAITH, HERD, HSWO, INF, JANTRA, NATA/GENETUP, NAYA GORETO, NFWLHA, NLR, Medical colleges, Private health care providers, Community volunteers, DOTS Committee, Health Facility Management Committee Individuals and Community peoples whose efforts and contributions have made Nepal Tuberculosis Control Programme a successful model. Finally, I appreciate the hard work and dedication of my team members at NTC and WHO in preparation of this Annual Report.

Dr. Rajendra Pant
Director
National TB Center

March 2013

EXECUTIVE SUMMARY

The annual report of National Tuberculosis Programme covers Shrawan 2068 to Asar 2069 (mid July 2011 to mid July 2012) period helps to provide details of the progress made on core activities and documents progress, achievements, and challenges of TB control program in Nepal. This report also describes the vision, policy and strategy of the Nepal NTP.

After adoption of the new STOP TB Strategy in 2006, NTP has implemented all six components to reduce the burden of Tuberculosis (TB) and achieve Millennium Development Goals and the Stop TB Partnership targets by 2015.

By mid July 2012 a total of 4,251 health institutions including 1,141 Treatment Centers and 3110 Sub Treatment Centers were offering DOTS. Currently there are 533 microscopy centers offering smear microscopy services, among these 430 operate within Government Health system, 103 through partner and I/NGOs. Culture and DST facilities are available from NTC and GENETUP laboratories at the central level.

During this reporting year NTP registered 35,735 TB cases; among these 17,777 (49.74%) were sputum smear positive (all forms: new smear positive, relapse, failure and return after default). Among the cohort of all the TB cases registered during this period 15,057 (42.13%) were new smear positive TB cases, 9128 (25.54%) were sputum smear negative and 7865 (22.00%) were extra-pulmonary TB cases and 965 (2.7%) were others cases. Similarly the treatment success rate among the latest cohort of patient completing treatment is 90%.

Drug Resistant TB Programme (DR TB) started in September 2005 with approval of Green Light Committee (GLC) of WHO. DR TB management services are available in all five Regions of the country. In order to improve access NTP further expanded the DR TB management sites during this reporting period and by mid July 2012 a total of 12 DOTS PLUS treatment centre and 65 DOTS Plus sub- centre. During this reporting period (cumulative from Sep 2005 to Mid July 2012) 1,221 DR cases have been registered for treatment under NTP. The cure rate of DR was 73%, mortality rate 3%, failure 10% and defaulted was 12%.

With technical and financial support from WHO-HQ/SEARO, Government of Nepal agreed to implement the “Practical Approach to Lung health” (PAL) as pilot project in two districts during 2007. In 2007, PAL was included in health system strengthening which is one of the Service Delivery Area (SDA) of Global Fund round 7 and prepared five year plan to expand the PAL activities in 29 districts of Nepal. In 2009, the Global Fund accepted the National Strategy Application (NSA) of Nepal. Accordingly NTP has developed a plan to implement PAL in 29 districts in the country by mid July 2015. The districts selection criteria were high population density, low TB case finding and districts resources mobilization. As per plan, by 2012 PAL implemented in 20 hospitals, 57 PHC and 118 HPs in 14 districts and will be completed 15 districts by mid July 2015.

The Global Fund to fight AIDS, TB and Malaria (GFATM) is the main source of financing for NTP, contributing more than 80% of the total NTP budget. For 2011/12, the GoN, LHL and WHO contribution was about

20%. The main challenges facing NTP are: the sustainability of the programme as it is largely dependent in external financing; expansion of culture and DST at regional levels; provision of socio economic support; and, introduction of infection control measures within NTP. The Norwegian Heart and Lung Patient Organisation (LHL) is supporting training, monitoring and evaluation, supervision activities and administrative support of the programme.

Collaboration with National AIDS Programme (NAP) is in progress. National TB HIV Collaboration Strategy is finalized and National TB HIV Coordination Committee is established. By 2015 it will be implemented in 35 districts of the country.

Public Private Partnership efforts were further enhanced during the last fiscal year to expand and sustain the successes of National TB Control Programme of Nepal. All the medical colleges in the country are providing NTP recommended DOTS services through designated centers. Orientation on DOTS to private practitioners, industrial workers and pharmacists has resulted in increased referral of TB cases from the private sectors to the NTP. Some private nursing homes, polyclinics and industries have established DOTS centers. The NTP regularly conducts orientation and training for concerned health personnel within military, police hospitals, prisons, schools, public media, Municipalities, Village Development Committees and private pharmacists in order to improve collaboration for appropriate tuberculosis diagnosis and treatment facilities according to DOTS strategy. In addition, NTP has excellent collaboration with a wide range of partners for Drug Resistant TB Programme; culture and DST services are provided by German Nepal Tuberculosis Project (GENETUP), and private sector in line with NTP policy and guideline are providing DR-TB services through nearly 50% of treatment centers and 35% of sub centers.

The ACSM intervention approach focusing on improving case detection and treatment adherence, combating stigma and discrimination, empowering people affected by TB and mobilizing political commitment and resources for TB. These challenges will not be met without far greater prioritization and improvement in TB-related communication activities. In addressing each of these issues, there are strong organizational synergies with efforts to combat HIV/AIDS. To cope above mentioned situation, activities like policy and political commitment, capacity development, community awareness, behavioural change communication have been planned under the ACSM in National Tuberculosis Programme, Nepal.

The main challenge NTP facing is the sustainability of the programme as it is largely dependent on external donors support. Lack of human resources particularly at the central level is one of the critical issue. Similarly, strengthening of National Reference Laboratory and introduction of infection control measures within the NTP are key challenges for NTP.

NTP has developed a National Strategic Plan during 2009 for 2010 – 2015 which provides new directions and vision for more effective and comprehensive TB control in Nepal. Under this strategic plan NTP will aim to detect 82% of infectious tuberculosis cases and treatment success rate will be maintained at 90%.

CONTENT

1. NTP Goal, Strategy and Target

STOP TB STRATEGY

Vision: Tuberculosis free Nepal

Goal: To reduce mortality, morbidity and transmission of tuberculosis until it is no longer a public health problem

Objectives:

- To dramatically reduce the National burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets Achieve universal access to high-quality diagnosis and patient-centered treatment
- Reduce the human suffering and socioeconomic burden associated with TB
- Protect poor and vulnerable populations from TB, TB/HIV and multi-drug-resistant TB

Targets:

- MDG 6, Target 8: ...halted by 2015 and begun to reverse the incidence.
- Targets linked to the MDGs and endorsed by the Stop TB Partnership:
- By 2005: detect 100% of new sputum smear-positive TB cases and cure at least 85% of these cases
- By 2015: reduce prevalence of and death due to TB by 50% relative to 1990
- By 2050: eliminate TB as a public health problem (<1 case per million population)

Components of the Stop TB strategy

1. Pursue high-quality DOTS expansion & enhancement

- Political commitment with increased and sustained financing
- Case detection through quality-assured bacteriology
- Standardized treatment with supervision and patient support
- An effective drug supply and management system
- Monitoring and evaluation system, and impact measurement

2. Address TB/HIV, DR-TB and other challenges

- Implement collaborative TB/HIV activities
- Prevent and control multi-drug-resistant TB
- Address prisoners, refugees and other high-risk groups and special situations

3. Contribute to health system strengthening

- Actively participate in efforts to improve system-wide policy, human resources, financing, management, service delivery, and information systems
- Share innovations that strengthen systems, including the Practical Approach to Lung Health (PAL)
- Adapt innovations from other fields

4. Engage all care providers

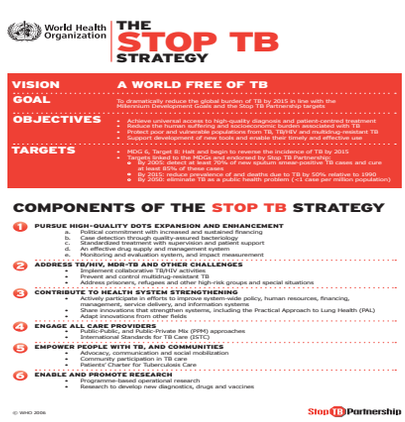
- Public-Public, and Public-Private Mix (PPM) approaches
- International Standards for Tuberculosis Care (ISTC)

5. Empower people with TB, and communities

- Advocacy, communication and social mobilization
- Community participation in TB care
- Patients' Charter for Tuberculosis Care

6. Enable and promote research

Programme-based operational research



NTP Strategic Aim and Policies

1. Strategic Aims

- NTP fully integrated within Government of Nepal general health care system
- Expansion of DOTS throughout the country up to the community level
- Establishment of treatment centre and sub centre up to the health post and sub health post level and in partnership with public and private sectors.
- Establishment of microscopy diagnostic centres at constituency level either at PHC centre or operated by public or private sector NTP partner
- Provision of high quality and adequate drug and other supplies through integrated supply management system of Logistic Management Division.

2. Major Policies

- National Tuberculosis Centre is the central unit of the NTP
- Free diagnostic and treatment services to all TB patients including Multi Drug Resistant TB cases.
- Passive case finding by smear microscopy through laboratory network with regular quality assurance system.
- Priority given to diagnosis of sputum smearpositive TB cases but diagnostic and treatment services also available for smear negative and extra-pulmonary TB cases.
- Use of standardised treatment regimens (short course chemotherapy - SCC) as per NTP guidelines.
- Each dose of Rifampicin to be directly observed (DOT) by fully trained and regularly supervised health care workers, community members, volunteers or family members.
- Use of quality assured first and second line TB drugs and availability of adequate amounts at all levels of the programme including provision of buffer stocks as per NTP policy.
- Basic unit of the NTP for diagnosis of TB are NTC, RTC, hospitals, medical colleges and PHC Centres.
- Evaluation of the NTP progress through four Monthly cohort analysis (case finding, treatment outcome and others)
- Provision of TB HIV collaborative services at selected sites through close partnership with National AIDS Programme.
- Collaboration with both public and private sector partners.
- Special focus on high risk populations such as slum dwellers, prisoners, refugees and congregate setting such as factories, hostels and armed service personnel barracks
- Close coordination and cooperation with NGOs/INGOs and external development partners
- Establishment of DOTS committee in each DOTS centre and sub centres

2. National TB Programme Organization

National Tuberculosis Programme

The National Tuberculosis Programme (NTP) is fully integrated within the general primary health services. NTP vision, goal, policies and strategy are in line with WHO and international recommendations.

National Tuberculosis Centre (NTC) is the focal point of the NTP. It is responsible for establishment of programme policies, strategy and planning. In addition, NTC also carries out the functions of national referral clinic. Central laboratory at the NTC is the focal point for NTP laboratory network which is responsible for policy and guideline development, training, quality control and supervision. Technical support, monitoring and evaluation, training, supervision, logistics, health education, communication, and research are key functions of NTC.

Estimation, procurement and supply of antituberculosis drugs is key responsibility of the National Tuberculosis Centre. World Health Organization is procuring both first and second line anti TB drugs for the programme. Drugs are distributed through the Logistics Management Division of the Department of Health Services.

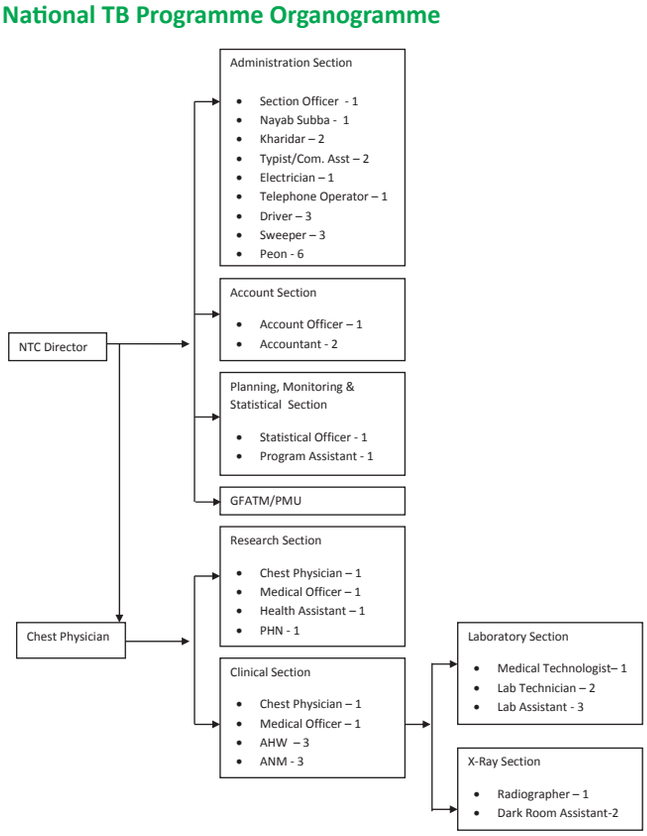
NTC has established of Programme Management Unit (PMU) at the central level for over all management of the Global Fund grants. This PMU consists an overall Coordination, Finance, Monitoring & evaluation, Sub Recipient Management, Training, Procurement and technical sections for Private Public Partnership, DR TB Management, Advocacy Communication & Social Mobilization.

At the **Regional level**, NTP activities are planned and carried out with coordination and cooperation of the Regional Health Directorate. The Regional Tuberculosis Centre (RTC) in Pokhara provides technical support to TB control activities in the Western Region in coordination with National Tuberculosis Center.

At the Regional level full time permanent Regional TB Leprosy Officers are appointed. Regional levels are responsible for programme implementation within the Regions. In addition, Regional level is also responsible for training, monitoring & evaluation and supervision of programme activities. Regional level provides logistical support and supply of TB drugs and other requirement through Regional Logistic Management Division.

At the **District level**, the District Health Office/ District Public Health Office is responsible for planning and implementation of NTP activities within the district. All 75 districts also have dedicated full time District TB Leprosy Officers in place. Within the district, the basic unit of management for diagnosis and treatment are district hospital and the primary health care centers. Directly Observed Treatment is available at Health Post, Sub Health Post and other health institutions within the district. District level is responsible for supervision, monitoring & evaluation, training and logistics management within the district.

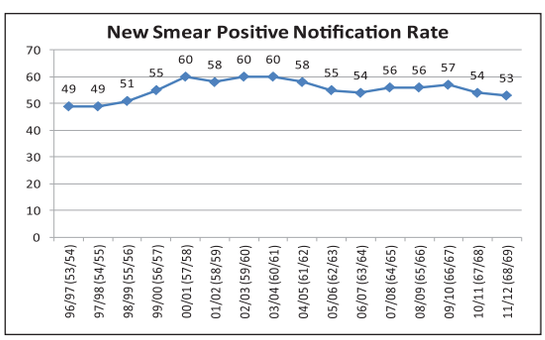
National TB Programme Organogramme



3. Epidemiology of Tuberculosis

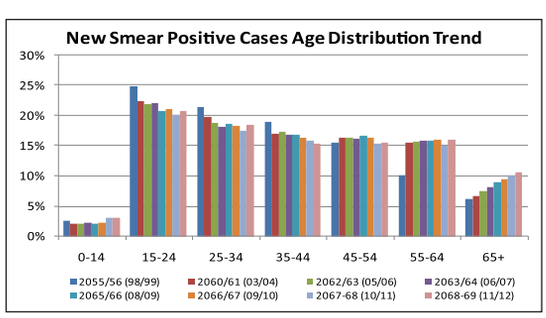
World Health Organization estimates prevalence of all types of tuberculosis cases for Nepal at 74,000 (243/100K) while the number of all forms of incidence cases is estimated around 50,000 (163/100K). With the introduction of Directly Observed Treatment Short course (DOTS) number of deaths has dramatically reduced from 9,712 (51/100k) in 1990 to 6,200 in 2010 (21/100k).

Source : Global Tuberculosis Control, WHO Report 2012

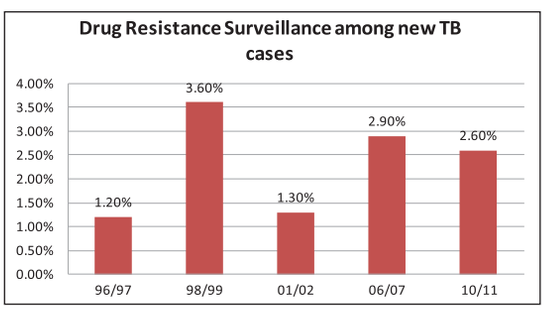


New smear positive TB case notification rose steadily from 1996 with the introduction of the DOTS strategy till 2001 when nationwide expansion was achieved.

Like many developing countries tuberculosis mostly affects the young age group of the population (15-54 year). However age distribution trend among new smear positive cases during recent couple of years shows a small but steady shift to older age group of patients. This evidence suggests beginning of the effects of good TB control and slowing of disease transmission in the community over recent years.



National TB Programme has undertaken four national surveys in Nepal as part of the WHO/ IUATLD Global Project on Anti-Tuberculosis Drug Resistance Surveillance. The first survey, in 1996, showed a prevalence of multidrug-resistance (resistance to at least Rifampicin and Isoniazid) at 1.1% among patients never previously treated for tuberculosis.

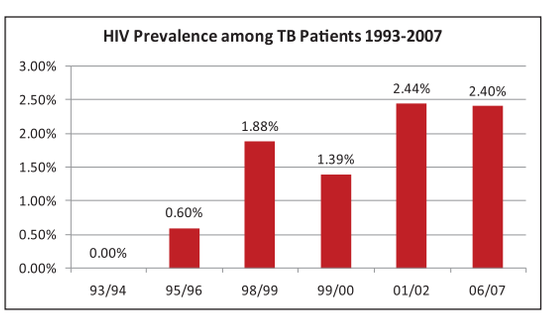


Similarly Drug Resistance prevalence was 1.0% in 1999, 1.3% in 2001 and 2.9% in 2006.

The proportion of DR-TB among new cases in Nepal has fluctuated from a little over 1.0% to 2.6% in the five surveys that have been conducted since 1996 making trends difficult to interpret. The latest estimate done in 2011 shows 2.6% among new cases and 17.6% among retreatment cases.

In 2009, with WHO support National TB Center in collaboration with NATA/GENETUP conducted surveillance of XDR TB among the registered DR TB patients. The study shows a prevalence of 5% of XDR-TB cases among DR TB cases registered.

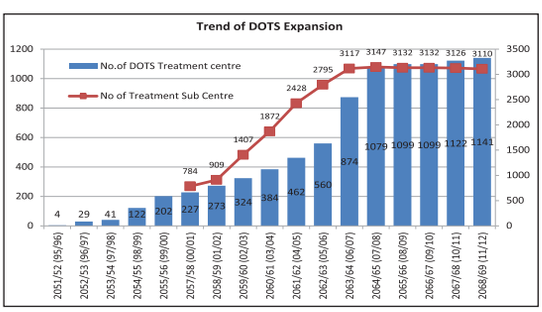
The prevalence of HIV is steadily rising in Nepal making collaborative measures from both National AIDS and TB Control Programme more important now than ever before. NTP has conducted several periodic surveys to establish the prevalence of HIV among TB patients. The latest survey showed HIV prevalence among TB patients at 2.4%.



4. Progress: Mid July 2011 – Mid July 2012 (Case Finding)

NTP Institutional Coverage:

Nepal NTP adopted DOTS strategy in 1996 and nationwide coverage was achieved in 2001. All DOTS sites are fully integrated within the general health services or run through NTP partner organizations in public and private sectors.



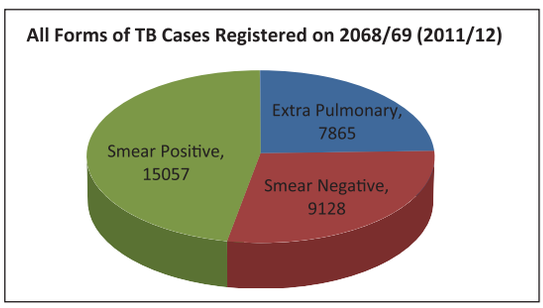
By mid July 2012 a total of 4,251 health institutions including 1,141 Treatment Centers and 3,110 Sub Treatment Centers were offering DOTS for provision of DOTS based TB control services.

Beside government health institutions several NTP partners also provide DOTS including; private nursing homes, polyclinics, factories, I/NGOs health clinics, eye hospitals, prisons, refugee camps, police hospitals, medical colleges, municipalities, Village Development Committees and District Development Committees.

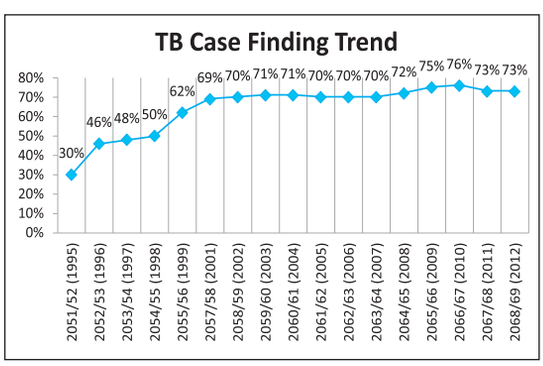
Case Finding

During this reporting year NTP registered 35,735 TB cases; among these 17,777 (49.74%) were sputum smear positive (all forms: new smear positive, relapse, failure and return after default). Among the cohort of all the TB cases registered during this latest year 15,057 (42.13%) were new smear positive TB cases.

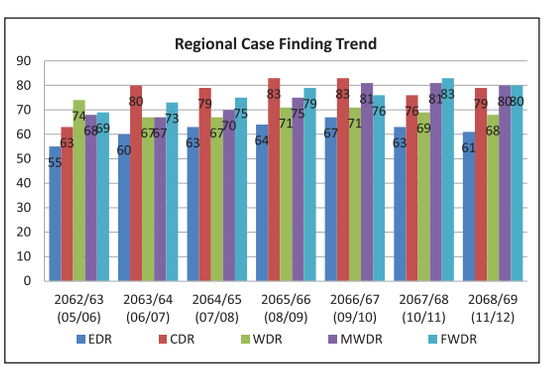
Similarly 9128 (25.54%) were sputum smear negative, 7865 (22.00%) were extra-pulmonary TB cases and 965 (2.7%) were other cases.



Case finding rate for mid July 2011 to mid July 2012 period is 73% for national level.



Case finding increased from 30% in pre DOTS era in 1995 to just over 70% in 2001 with nationwide coverage of DOTS programme. Overall, NTP have achieved more than 70% case finding rate from last five years.



Progress: Mid July 2010– Mid July 2011 (Treatment Outcome)

Treatment Policies

The Nepal National TB Program Policy provides free diagnostic and treatment services to all TB patients registered in the programme.

In line with the recommendations of WHO and other international technical agencies NTP now offers fixed-dose combination (FDC) tablets for the treatment of tuberculosis (TB). Primary reason for use of FDC drugs arises from the fact that it prevent monotherapy, reduces the emergence of drug resistant tuberculosis, simplifies treatment and minimize prescription error and increase patient and treatment provider compliance. Use of FDCs also simplifies drug stock management, shipping and distribution. NTP treatment regimen includes fixed dose combination drugs; HRZE, HRE and HR.

A key milestone in the history of Nepal National TB Programme was the introduction of six month treatment regimen in 2009.

NTP Treatment Regimens

Category	Regimen	Type of patients
I	2(HRZE)/4(HR) (Combination)	New sputum smear-positive New sputum smear-negative New extra-pulmonary
II	2S(HRZE)/1(HRZE)/5(HRE) (Combination)	Re-treatment TB cases including failures, relapse and return after default
Child Regimens		
I	2(HRZE)/4(HR)	New smear-positive pulmonary TB New smear-negative pulmonary TB with extensive parenchymal involvement Severe form of extrapulmonary TB (other than TB meningitis-see below)
I	2(HRZE)/10(HR)[c]	TB meningitis Osteoarticular TB
II	2S(HRZE)/1(HRZE)/5(HRE)	Retreatment TB cases including failures, relapse and return after default

[c] The recommended treatment duration for treatment of TB meningitis and osteoarticular TB is for 12 months

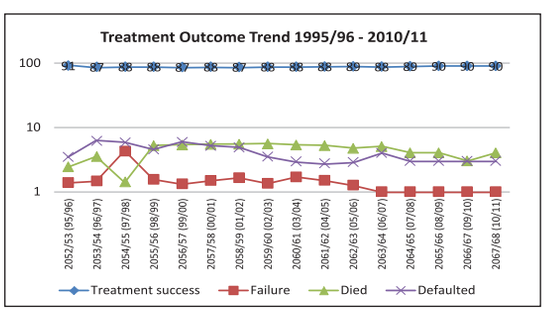
In addition to change in treatment duration patients in the previous Category I and category III now receive same treatment i.e. all new and complicated TB cases and smear negative and extrapulmonary TB cases get same six months treatment. Category II treatment regimen for retreatment TB cases; including failures, relapse and return after default remains the same.

Advantages of switching to a six-month regimen includes; shorter treatment duration, higher efficacy and the fact that six month treatment will further improve collaboration with partners as this regimen is preferred by public and private sector partners including private practitioners.

Treatment Outcomes

Since introduction of DOTS in Nepal in 1996 NTP has consistently achieved and exceeded the global target of treatment success (85%).

During July 2010 – July 2011 period a total of 35,964 TB patients were registered for treatment in NTP.

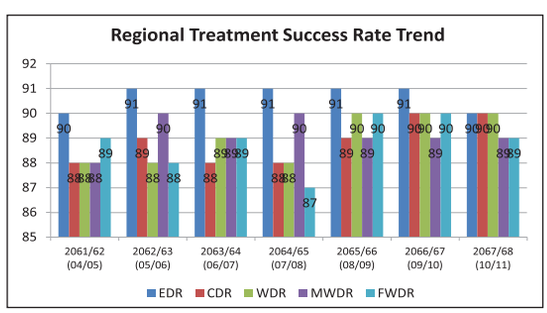


Treatment success rate among new sputum smear positive TB cases (15000) was 90%. This years the default rate goes 1% higher than last year at 4% while failure rate among new smear positive is 3%.

Treatment Outcome: Smear Positive among pulmonary TB cases mid July 2010 – mid July 2011

	Registered	Cure	Complete	Died	Default	Failure	Treatment Success Rate
Female	4741	4217	110	65	151	78	91
%	32%	89%	2%	1%	3%	2%	
Male	10259	8926	262	144	376	328	90
%	68%	87%	3%	1%	4%	3%	
Total	15000	13143	372	209	527	406	90

Overall, all Regions have achieved more than 85% treatment success rate in FY 2067/68 (2010-11).



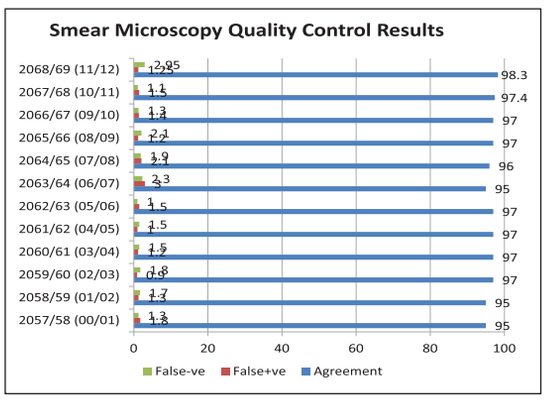
5. NTP Laboratory Network

Sputum Microscopy and Microscopy Network

Tuberculosis diagnosis and monitoring rely in Sputum microscopy of NTP because of its low cost and easier to perform. Direct sputum microscopy is popular worldwide. At present there are 533 microscopy centres catering the sputum microscopy examination throughout the country. Most of the microscopy centres are established in government setting and few are established in non-governmental organization and private sectors. NTP is providing reagents, chemicals and equipment to every microscopy centres and they are providing sputum smear examination free of cost. To reduce the workload in high burden microscopy centres, Florescence Microscopy is provided and they are functional now. This microscope does the work ten times more than Bright field Microscope.

External Quality Assurance (EQA) is another important task for this program. There is good laboratory networking between microscopy centres (MCs) DHO/DPHO, RQCC and the NTC. Microscopy centres send their slides to their respective regional quality control centres via district health office. Five Regional quality control centres (RQCC) are functioning smoothly with help of skilled and trained quality control assessors. BNMT/NATA is doing EQA in eastern region; NTC is working for EQA at central region. RTC Pokhara is working for EQA at western region, Mid-western regional health Directorate is working for EQA in Mid-Western Region and NLR Dhangadhi is working for EQA at Far-Western region.

Lot Quality Assurance Sampling System (LQAS) is the main slide selecting method for EQA. Previously NTP is applying system for all positive and 10% negative slide for EQA. In LQAS, slides are collected by using standard statistical tools, systematic sampling technique, for re-checking of slides to find agreement between microscopy centre and quality control centre. The average agreement rate of slide re-checking is more than 98% in the FY 2011/12. Moreover agreement rate is slightly increasing with value 95 percent to 98 percent from FY 2006/7 to 2011/12.



NTC lab is a National Reference Laboratory. It is working as a National Quality Control Centre (NQCC). Discordant slides are rechecked by NQCA .Feedback is send to RQCC. Feedback is provided by Regional quality control centres (RQCC) to the microscopy centres through their DHO/DPHO for their performance improvement.

NTP Laboratory Network Coverage

Currently 533 microscopy centers are offering smear microscopy services, among these 430 operates within Government Health system and 103 through partner I/NGOs. Culture and DST facilities are available from NTC and GENETUP laboratories at the central level.

Sputum Culture and Drug Susceptibility Test (DST)

NTC-National Reference Laboratory and GENETUP are providing culture and DST facility. NTC and GENETUP are working under the TB Supranational Lab-Gauting, Germany. Gauting, Germany is looking external quality assurance of these laboratories. To manage the toxic effect of drugs, NTP is providing additional hematological and biochemical tests free of cost to DR-TB patients all over the DR Treatment centers in the country.

In the beginning of 2012, a new molecular diagnostic tool; Gene Xpert MTB/RIF machines for rapid diagnosis of DR TB had been introduced to nine health facilities (7 in ER and 2 in CR) in collaboration with NTP Nepal and International Organization for Migration (IOM) through TB Reach funding. NTP is planning to expand this diagnostic tool in other regions as well.

Human Resource Development

Human Resource Development is one of the essential components and core functions of Tuberculosis Control Programme. NTP has defined roles, functions, and responsibilities defined the health workforce at all levels of the programme. NTP follows standardized approach and tools for human resource development including use of standard training schedule and material. Training and orientation of new staff, refresher training and on-the-job training during the supervision, monitoring and review meetings are key ongoing functions of NTP.

Following are the details of the trainings, orientations workshop and meetings organized by NTP during July 2011 to July 2012 period.

Central Level Training

Following Training Activities were carried out by National Tuberculosis Centre

S.NO.	Activities	Target	Achievement
1	IT Skill Development training	15	1
2	Basic Microscopy Training	45	37
3	Microscopy refresher Training	30	32
4	LQAS/SOP training for Lab Staff	80	68
5	DR TB Training	1	1
6	Medical Officer/Health Worker Training on DR TB	300	225
7	National Seminar on DR TB Management	1	1
8	ZEN floresece basic microscopy training	75	74
9	ToT on ACSM	1	1
10	National Monitoring, Evaluation & Planning Workshop	3	3
11	Culture basic & refersher training for Lab staff	12	11
12	TB/HIV TOT	1	1
13	DR Patient Skill Development Training	1	1

Regional Level Training

Following Training Activities were carried out by National Tuberculosis Centre/Regional Health Directorates at regional level

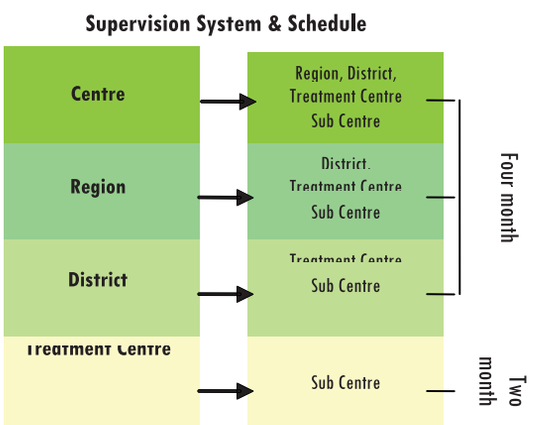
S.NO	Activities	Total Person trained/ Oriented	Remarks
1	Smear Preparation training	120	
2	Late patient Tracer training	140	
3	DOTS Training for Nursing Staff,	218	
5	Pal Training	900	
6	Refresher Microscopy Training	168	
7	Refresher Module Training	1395	
8	Strengthen Training on TB for female health worker and volenteer worker	995	
9	Regional Monitoring, Evaluation & Planning workshop	15	
10	Lab Workshop	492	
11	Stat Workshop	75	

District & Periphery Level Training Orientation			
Following Training/Orientations/Workshop were conducted during FY 2068/69 by respective districts at district centre and periphery level.			
	Training/Orientation	**Total Person trained/ oriented**	**Remarks**
2	**Training**		
2.1	Smear Preparation Training	1000	
2.2	Late Patient Tracer Training	1250	
2.3	TB Training for VHW, MCHW	15000	
2.4	TB Training for School Teachers	4480	
2.5	TB-HIV Training for FCHV	500	
2.6	TB Training for FCHV	15740	
3	**Community Awareness-Orientation**		
3.1	DOTS Orientation for Drug Retailer		
3.2	TB Orientation for Urban FCHV	3620	
3.3	TB Orientation for DOTS/Health Management Committee	5000	
3.4	DOTS Orientation for Patient Patients and Family	2130	
3.5	TB Orientation to Factory Workers	940	
3.6	TB Orientation for Prisioners	1200	
3.7	TB School Health Programme	1740	
3.8	TB Awareness Programme of Mothers Group	4440	
3.9	TB Orietation for Faith Healers	560	
3.10	TB Orientation for CBO and NGOs working in HIV field	300	
3.11	TB Orientation for Targeted Voulenteers Group in Community	940	
3.12	Patients to Patients	2130	
3.13	Capacity Development of the Patients	2250	
3.14	TB Orientation for street children	150	
3.15	TB Orientation for Janajati Dalit	2200	
3.16	TB Orientation for targeted group	600	
3.17	TB Orientation in Refugee Camp, Tempal and Monastry	400	
3.18	TB Orientation for Migrated group	400	

6. Supervision & Monitoring and Logistics System

Supervision, Monitoring & Evaluation

Supervision and monitoring is carried out through regular visits to all levels of the programme as per NTP policy. In addition to supervision and monitoring, quarterly reporting of activities is carried out at trimesterly planning and reporting workshop at all levels of the programme.



The NTP maintains a regular monitoring system which includes case finding, smear conversion, treatment outcome and programme management reports from all levels of the programme. Data is initially reported and analyzed by the District Health Office during the district reporting and Planning workshops for treatment centre staff. District TB and Leprosy Officers (DTLOs) report on treatment centre and district during the Regional Reporting and Planning workshops. Finally, Regional TB and Leprosy Officers (RTLOs) report by district at national reporting workshops. All of these Reporting and Planning workshops take place every four months, at the beginning of the new trimester.

Logistic Supply Management

The National Tuberculosis Control Programme provides drugs and other programme supplies on regular four monthly basis. NTP drug ordering system originates from the trimesterly reporting and planning meetings from clinic level staff to calculate their requirements based on trimesterly utilization and buffer stocks requirements.

Monitoring and Evaluation		
International	International Review	Annual
National	National Reporting & Planning Workshop	Four Monthly
Regional	Regional Reporting & Planning Workshop	Four Monthly
District	District Reporting & Planning Workshop	Four Monthly
Treatment Centre	Treatment Center Reporting & Planning Workshop	Four Monthly

Each level of the programme maintains a four months additional buffer stock to prevent stock out. The buffer stock kept out at regional level has been increased from 4 to 6 months in order to guard against shortages caused by delays in delivery from national level due to unforeseen natural and other disturbances.

NTP Procurement, demand and supply organizational chart			
Procurement	Drug and other supply demand	Responsible Authority & Level	Supply
▲		Global Drug Facility - WHO HQ	
▲		WHO SEARO	
▲	▲	WHO Nepal	▼
▲	▲	NTP/MOHP (PR)	▼
	▲	Regional Logistic Management Office/Store	▼
	▲	District Logistic Management Office/Store	▼
	▲	Primary Health Center	▼
	▲	Health Post	▼
	▲	Sub Health Post	

DR TB Control and Management

Drug Resistant Tuberculosis (DR TB) Management:

Drug Resistant TB Management programme started in September 2005 with WHO Green Light Committee approval. Guidelines, training modules and specific recording reporting forms and registers were developed by NTC with technical support from WHO.

DR TB Patient Registration Categories:

NTP offers fully supervised standard regimen for treatment of DR TB.

DR TB Technical Advisory Group at the national level periodically reviews programme policies, strategy, performance as well as it provides guidance on management of clinically complex DR TB cases.

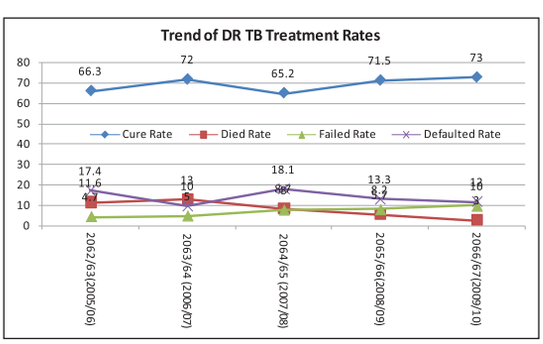
The NTP has carried out periodic surveys on drug resistance in 2011. The last survey showed that Multi Drug Resistant (DR) TB is 2.6% in newly registered cases and 17.6% in previously treated TB cases. In addition, the survey showed that the prevalence of XDR-TB among DR-TB cases is estimated at 8% and 28% of all DR-TB cases are resistant to FQs (pre-XDR). Based on this estimation, there should be identified 550 DR-TB cases among new smear-positive patients, 446 DR-TB cases among estimated previously treated cases and 80 XDR-TB cases in Nepal each year. Out of the estimated 996 DR-TB cases, only 251(25%) and 80 XDR-TB cases, only 26 (33%) were covered by the programme. More than 70% DR and XDR cases are still out of programme ring and they are spreading DR/XDR TB bacilli to almost 10,000 people in all over Nepal annually.

Type of Category	Definition
New	A patient who has received no or less than one month of anti-tuberculosis treatment. This group includes patients who have confirmed DR TB after DST.
Relapse	A patient whose most recent treatment outcome was “cured” or “treatment completed”, and who is subsequently diagnosed with bacteriologically positive TB by sputum smear microscopy or culture.
Treatment after Default	A patient who returns to treatment, bacteriologically positive by sputum smear microscopy or culture, following interruption of treatment for two or more consecutive months.
Treatment after failure Category I	A patient who has received Category I treatment for TB and in whom treatment has failed. Failure is defined as sputum smear-positive at five months or later during treatment (However, patients who are doing poorly clinically on Category I and get switched to a DR-TB regimen, on TAG recommendation, before the time of failure are also placed in this category).
Treatment after failure Category II	A patient who has received Category II treatment for TB and in whom treatment has failed. Failure is defined as sputum smear-positive at five months or later during treatment. (However, patients who are doing poorly clinically on Category II and get switched to a DR-TB regimen before the time of failure are also placed in this category after confirmation through rapid DST).
Transfer In	A patient who has transferred in from another register for treatment of DR-TB to continue DR-TB treatment.
Other	These are types of patients who may not fit into any of the above categories. Examples include the following: sputum smear-positive patients with unknown previous treatment outcome; sputum smear-positive patients who received treatment other than Category I or II (possibly in the private sector); patients who have received several unsuccessful treatments, were considered incurable by health staff and who have lived with active TB disease with no or inadequate treatment (so-called “chronic” patients).

Multi Drug Resistant TB new treatment regimens:

8(Km-Z-Lfx-Eto-Cs)/12(Lfx-Eto-Cs-Z)	
Intensive Phase (8 – 12 months)	**Continuation Phase (12 months)**
Kanamycin (KM) Pyrazinamide (Z) Levofloxacin (Lfx) Ethionamide (Eto) Cycloserine (Cs)	Pyrazinamide (Z) Levofloxacin (Lfx) Ethionamide (Eto) Cycloserine (Cs)

For addressing above mentioned issues, DR- TB management program was started in September 2005 with the approval of World Health Organization (WHO), Green Light Committee. The WHO gave an approval to treat 350 DR tuberculosis cases for first two years period. In the beginning DR tuberculosis management program was started from 5 treatment centres and 16 sub-treatment centres with the technical and financial assistance from the WHO. Now, National Tuberculosis Program has expanded DR tuberculosis management services in 5 development regions of the country with 12 treatment centres and 65 sub-treatment centres till July 2012. 1221 (cumulative figures since September 2005) patients registered up to 15 July 2012. Cure rate of DR-TB for the year 2011/12 was 73%. 8 DR-TB hostels have been established in five development regions between 15 July 2012.



DR TB Management and Private Public Partnership

Nepal DR TB Management Programme is a unique example of Private Public Partnership. Under the leadership and guidance of NTP several private sector partners are providing DR TB management services.

German Nepal Tuberculosis Project (GENTUP) provides culture and Drug Sensitivity Testing (DST) for this programme. GENTUP laboratory is working under quality control of Gauting Supra National Reference Laboratory in Germany.

Almost half of the DR TB Treatment Centers and close of 30% of the Sub Treatment Centers are operated by NTP partners from the private sector which include Medical Colleges and I/NGOs. All partners follow NTP guides and regularly report using standardized forms and formats while NTP provides technical support, training and second line TB drugs.

Nepal DR TB programme as regional training site:

Nepal DR TB management programme has been a model of ambulatory treatment in the WHO South East Asia Region. Since inception of this programme several countries have visited the programme for training and field visits, including; Bangladesh, Bhutan, Indonesia, Myanmar and North Korea. NTP organized orientation sessions and field visits to explain the organization and implementation of the DR TB management programme.

Constraints and Challenges: Insufficient socio economic support and lack of infection control are key challenges for optimal performance of DR TB management in Nepal. Similarly, DR TB management programme is managed through existing staff within PHC who receive no extra remunerations or incentives for this additional responsibility.

XDR TB Management

XDR-TB is defined as TB caused by M Tuberculosis bacilli resistant to any fluoroquinolone, and at least one of three injectable second-line drugs (capreomycin, kanamycin, and amikacin), in addition to resistance to Rifampicin and Isoniazid . Nepal reported its first XDR-TB cases in 2008. XDR-TB has proven to be much more difficult to treat than DR-TB and is extremely difficult to treat in HIV-positive patients. Since 2010, 46 patients are registered for XDR Treatment in NTP.

XDR TB Treatment regimen

First Phase 12 months (Intensive Phase)	**Second Phase** 12 months (Continuation Phase)
Capreomycin (CM) Moxifloxacin (Mfx) PAS Cycloserine (Cs) Amx/Clv Clofazimine Any other drug susceptible	Moxifloxacin (Mfx) PAS Cycloserine (Cs) Amx/Clv Clofazimine Any other drug susceptible

Summary of the two treatment phases

In summary, the treatment of DR-TB is administered in two phases namely the initial intensive phase and the continuation phase, with duration being slightly different for the Std DR-TB regimen and the Std XDR-TB regimen.

Public Private Partnership (PPP)

Endorsement of New Stop Strategy as a national policy of NTP by Government of Nepal in 2006, NTP has proposed serial of activities toward engaging private & public health providers to ensure wider provision of standardized diagnosis, treatment and follow-up in line with national protocol.

DOTS orientation/training to public/private practitioners, paramedics, nursing, industrial workers, slum dwellers, prisoners, pharmacists, laboratory staffs etc is one of the key activities of NTP. Urban TB control program through mobilization of private health sectors, health personnel and volunteers is a part of PPP activities and country wide 43 municipalities are engaged till now.

Objectives of PPP:

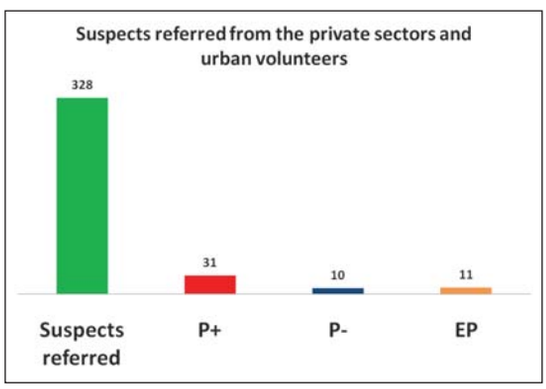
To engage public and private health care providers to ensure provision of quality TB services in line with NTP policy, International Standard of TB Care (ISTC) and Patient Charter.

Urban TB control program:

The burden of TB in urban is high because the urban migration rate is in increasing trend. At the same time rapid expansion of private health care facilities in urban is in place to fulfill the diverse interest of urban people. NTP has initiated to engage private health providers of urban by developing linkage (recording, referral & feedback) mechanism between private health providers and NTP.

The given fact shows that (See Graph) 14 Urban Health Clinics & their associate urban volunteers of Kathmandu district referred 328 TB suspects to nearby diagnosis centre and after analysis of referral slip & feedback: 31 cases are diagnosed as Pulmonary +ve TB, 10 cases as Pulmonary –ve and 11 cases as Extra Pulmonary TB during the FY 2068/069.

NTP has planned to extend its PPM activities in all 58 Municipalities of Nepal by 15 July 2015. The



NTC carried out review of PPM programme in 2012 and made following recommendations for further development;

Regulation for managing Anti-TB drugs at market:

Anti TB drugs are commonly available at the local markets at the price of NPR 36/per dose/day. There is not placed any mechanism to ensure the complete treatment of patients from the private sector. Hence, the NTC should take initiation to regulate for managing availability of Anti TB drugs at local market.

Expansion of DOTS in urban health clinic: The Municipality Offices have already established urban health clinics to provide public health services to the urban community. The NTP should developed aggressive plan for establishing DOT centres at urban health clinics to improve the accessibility of TB services and DOTS centres opening hours also should be flexible considering patient needs.

Establish strong coordination with likeminded stakeholders in the district: Every district has already formed PPM working committee but very few people have knowledge about that committee and its roles and responsibilities in the TB control activities. The district (public) health offices and partners needs to be developed very strong mechanism to make coordination among stakeholders effective.

Inventory of private health care providers: It is true that NTP has a lack of information about total private laboratories, clinics, nursing homes and other health care providers at the district. The NTC should prepare inventory of all private health service providers and prepare a plan of action to enhance the performance of PPM programme.

Involvement of private medical practitioners in TB control: It is evident that people are seeking tuberculosis care from private sectors, which requires involvement of private health care providers in the TB control programme. Depending upon the institutional capacity and resources, they can be involved in various areas such as TB screening, diagnosis, and treatment and referral. Particularly, private pharmacies might have a prominent role in suspect identification and referral; private lab for quality diagnosis and private practitioners in TB case management.

Training/Orientation to Private Medical Practitioners: private health care providers needs to be properly oriented and trained on TB and its services, and National protocol of TB case management: screening, diagnosis, treatment, monitoring, follow up and referral. It is recommended that NTP guidelines should be distributed to all the Private Medical Practitioners (PMP).

Quality assessment in private sector: TB patients have the right to get the quality care (diagnosis, treatment and follow-up) and ensuring that their rights are met is the prime responsibility of national TB control programme. Thus, it is crucial to assess the quality of microscopy in the private sectors.

Regular monitoring and mentoring to PMPs: While formalizing the programme agreement with private sector, a clear monitoring framework should be developed. Local TB supervisors should technically be able to provide onsite mentoring to PMPs. Local public health authorities should take the lead role to harmonize the public private mix in urban settings and ensure that the national standards are utilized, free diagnosis is provided, free drugs are given, and records are kept well and follow-up done as required.

Support from NTP and other stakeholders: Since private sectors are delivering TB services in the study areas, a strong support from the national TB control programme as well as from other stakeholders is needed in order to strengthen the existing services and ensure effective implementation and sustain of PPM activities.

Public awareness on TB and its services: Aggressive and innovative awareness activities on TB and its services among the people are needed so that they themselves seek quality care.

Management of TB/HIV Co-infection

Background and Magnitude of the problem:

National Tuberculosis Center (NTC) has been implementing all 6 components of WHO Stop TB Strategy since 2006. The NTP also adopted TB/HIV strategy and policy in 2009. One of the most important and challenging component is TB/HIV as it is needed to coordinate between two programs for effective implementation of the activities. Moreover, it is also helpful to finding out more TB/HIV co-infected cases which increases TB case detection rate and prevent the case fatality rate form TB. So, by considering the objectives of the National Strategy, NTC has been implementing its program activities through the Nepal Government networks and partners organizations which are extremely fundamental to scale up the program in the target areas.

The TB-HIV co-infection rate (the prevalence of HIV infection among TB patients) in Nepal is 2.4%. Overall HIV prevalence in Nepal is estimated at 0.30% in the adult population and it is categorised as a concentrated epidemic. Thus HIV prevention and care must be a priority concern for TB Prevention and Control Programmers and TB care and prevention should be a priority concern for HIV/AIDS Prevention and Control programmers.

Rational for TB/HIV collaboration:

Collaborative TB/HIV activities aim to decrease the burden of TB and HIV in a population affected by both diseases through collaboration between programs. This approach aims to provide integrated and comprehensive tuberculosis and HIV prevention, treatment and care service as close to the client as possible, maintaining existing tuberculosis and HIV program 25 districts through NTC and 5 districts through NCASC rather than combining them or creating a third TB/HIV program center. The other rational for TB/HIV collaboration is, more than any time before there is increased opportunity for joint working with clearer policy guidance and availability of more resource. In addition there is a big need to promote efficient utilization of resource allocated by both programmers. Lastly there is a common need to increase access to comprehensive services to achieve the millennium development goals (MDG) for HIV and tuberculosis.

Objectives of the TB/HIV collaborative activities:

1. Reducing HIV incidence among TB patients.

2. Reducing TB incidence among PLWHAS.

3. Improve care of people for people who are co-infected with TB and HIV.

Major collaborative approaches are as following:

- Establish and Strengthen the TB/HIV Mechanism for Collaboration at all levels.
- Joint TB-HIV planning.
- Develop operational guidelines, training manuals & IEC materials
- Conduct surveillance & operational research (OR) to enhance TB/HIV services.
- Joint supervision, Monitoring and Evaluation of collaborative TB-HIV activities.
- Decrease the Burden of TB in People Living with HIV/AIDS and vice versa.
- Establish and strengthen intensified TB/HIV case-finding and improve access to TB and HIV services.
- Implementation of Isoniazid Preventive Therapy for HIV positive.
- Advocacy Communication and Social Mobilization (ACSM) for TB/HIV
- Provision of cotrimoxazole preventive therapy.
- ARV for HIV-positive and TB patients.

- Provider-initiated and delivered HIV testing and counselling in TB clinical setting.
- Co-morbidity management and monitored.
- Provide care & support to TB/HIV co-infected cases.
- Development & strengthen Human Resources to implement TB/HIV Collaboration.

Major Achievement during FY 2011/12:

- TB/HIV related Manuals, Guidelines, Policy documents and IEC materials published and updated.
- TB/HIV related basic training, refresher training, orientation, TOT to community, District level Health workers and PLHIV group, FCHVs etc. conducted
- TB/HIV Surveillance conducting on regular basis
- DOTS in ART center established.
- Sensitization and advocacy meeting/workshop conducted
- National Coordination Committee meeting conducted
- TB/HIV technical sub-committee meeting conducted
- IPT implemented in 5 sites of three districts (Kathmandu, Kaski, Kailali)
- TB/HIV register, form and format up to periphery level HF supplied

Challenges and gaps in TB/HIV collaborative activities:

- HIV is often associated with sputum smear-negative and extra-pulmonary forms of TB, which are more difficult to diagnose due to antiquated diagnostic tools and inadequate lab capacity — better diagnostic methods and tools are urgently needed.
- Scale up and expand implementation of collaborative TB/HIV activities to ensure effective health sector response
- Increase political and resource commitment to collaborative TB/HIV activities
- Contribute to strengthening health systems to deliver TB/HIV activities collaborative TB and HIV programs to “ensure that all patients with TB are offered VCT [voluntary counseling and testing] and all HIV patients are tested and treated for TB.” but not required or universally available which suggested that opportunities are being missed to reduce mortality of PLWHA due to TB and identify additional HIV-positive individuals.
- Link all HIV-infected TB patients to HIV care and treatment, including ARV and cotrimoxazole therapy
- Link all HIV-infected TB suspects to TB diagnosis and TB treatment using directly observed treatment, short-course (DOTS)
- An important aspect of effective TB-HIV coordination is ensuring that TB-HIV activities link to national TB-HIV strategic plans and TB- and AIDS-specific plans and programs overall.
- Activities in support of national TB-HIV efforts could include training of healthcare workers in diagnosis, treatment, administration and management of TB-HIV cases, strengthening recording and reporting systems in line with national surveillance of TB-HIV co-infection, facilitating discussions between national AIDS and TB program managers and staff, and improving laboratory capacity for diagnosis of TB in HIV-infected patients.
- Indicators and targets that requires to report do not address key areas that effectively measure impact on morbidity and mortality of TB-HIV co-infected patients.

These include the numbers of:

- TB patients tested for HIV and found to be HIV-positive
- HIV-positive TB patients receiving CPT or placed on ART
- PLWHA screened for TB
- HIV-positive TB patients referred to HIV care and support services during TB treatment
- Individuals trained to provide TB diagnostic services for PLWHA

- Evidence of knowledge sharing across key stakeholders on TB-HIV implementation is lacking, and public dissemination of data is limited and the inclusion of TB-HIV indicators within national surveillance systems in order to reflect a more meaningful measure of impact.
- Not all people living with HIV and a far smaller proportion received isoniazid preventive treatment.
- Special groups who are particularly affected by the dual TB/HIV epidemic such as people who use drugs, prisoners, pregnant women and children are not yet benefiting from the progress and need special attention. High level scientific interest and resources need to be solicited for the numerous unmet research needs that are essential for the dual epidemic.
- Staff, infrastructure and quality of services gap between the two National programs.
- On planning and management of TB/HIV collaborative activities with special emphasis to capacity building. The issues to be addressed include:
- Proposal development and soliciting fund for training on TB/HIV collaborative activities.
- Ensuring uninterrupted TB/HIV supplies
- Setting up a coordinating body for TB/HIV collaborative activities at all levels
- Support in the area of TB/HIV operational researches
- Conducting supportive supervision, monitoring and evaluation of TB/HIV collaborative activities
- Establishment of VCT/DOTS in the health care setting needs to deploy extensive effort of both centers.
- Integration of services: RH, TB, Nutrition, IEC, Training
- Involvement of private and business houses
- Involvement of uniform-forces and line agencies

Practical Approach to Lung health (PAL)

Background:

The Practical Approach to Lung Health (PAL-Nepal) was initiated in 1999 as a pilot project in Nawalparasi district of Nepal. In July 2002, PAL was launched as a pilot study to explore the feasibility and effectiveness of PAL. The key outcomes of the study were development of PAL-Nepal guidelines which was field tested, training methodology with duration of training and receptiveness for PAL which was high among the national level. It was also concluded that PAL guidelines needs some improvement as per country situation. During that study, health facilities (primary health centres, health posts and sub health posts) of Nawalparasi districts were included and effects of PAL in relation to rational use of drugs and antibiotics also assessed and it was satisfactory. WHO-Nepal was responsible for coordination among Nepalese and international PAL-Nepal partners. National TB Centre (NTC) was responsible for pilot implementation of PAL-Nepal. In 2004 at the Global level, WHO Tobacco Free Initiative (TFI) and WHO Stop TB (STB) initiated collaboration to integrate tuberculosis (TB) and tobacco control activities within the district health system. WHO (TFI & STB) have developed a policy document on the integration of TB and tobacco control activities into PHC services using the PAL.

In May 2007, the team from WHO-HQ and WHO-SEARO visited Nepal to see the feasibility of re-implementation of PAL pilot and the Government of Nepal agreed to implement PAL project in two districts of Nepal namely Bhaktapur and Nawalparasi. The team from WHO-HQ mentioned in their report to implement PAL pilot project at two hospitals, all the PHC centres and Health Posts of two districts. In order to implement PAL pilot project in Nepal, WHO recruited one TIP since mid July 2007 and provided funds for PAL-Nepal pilot project.

The PAL-Nepal programme completed the initial activities and ready to implement. The health workers in the field were found enthusiastic and motivated to carry out responsibility. The health workers of Nepal already successfully implemented TB and DOTS program. The peak flow meter, reporting format and smoking cessation register supplied to each health facilities. The supervisory structure is present in the field.

In 2007, PAL included in health system strengthening which is one of the Service Delivery Area (SDA) of Global Fund round 7 and prepared five year plan to expand the PAL activities in 29 districts of Nepal. As per plan, Kapilvistu, Lalitpur and Bhaktapur districts were selected for implanting PAL activities. In 2009, the Global Fund introduced concept of National Strategy Application (NSA) in Nepal. All rounds were included in the NSA including PAL. From the NSA, Sunsari, Kathmandu, Rupandehi, Dang, Kailali districts were selected for implementing PAL activities in year one (16 July 2010 - 15 July 2011). Similarly, Siraha, Dhanusha, Tanahu, Baitadi and Bardia were selected to implement PAL activity for second year. At present PAL implemented in 20 hospitals, 57 Primary Health Care Centers (PHCC) and 118 Health Posts in 14 districts mentioned above. Similarly, Nepal will complete PAL expansion in 29 districts in the country till mid July, 2015. The districts selection criteria were high population density, low TB case finding, and districts resources mobilization.

Practical Approach to Lung Health

With adoption of Stop TB Strategy in 2006 NTP has embarked on Practical Approach to Lung Health (PAL) initiative as part of the Health System Strengthening component.

Strategy of PAL programme are:

1. PAL is a syndromic approach to the management of patients who attend primary health care services for respiratory symptoms.
2. PAL strategy targets multi-purpose health workers, nurses, doctors, and managers in primary health care settings with successful TB control programs in low and middle-income countries.

Main objectives of the PAL programme are:

1. Standardization of diagnosis and treatment of respiratory conditions
2. Improve coordination of respiratory care in the primary health care system
3. Increase TB case finding
4. Rationale use of medication to respiratory symptomatic
5. Capacity building of health workers

This initiative is to address the management of respiratory patients in primary health care (PHC) settings while expanding TB detection and quality TB services. PAL focuses on the most prevalent respiratory diseases at level health facilities such as pneumonia, acute bronchitis and other acute respiratory infections, pneumonia, tuberculosis, and chronic respiratory conditions including chronic bronchitis, asthma and chronic obstructive pulmonary disease (COPD).

PAL looks for an integrated case management of respiratory patients in PHC on the basis of two main approaches: standardization of diagnosis and treatment of respiratory conditions, and coordination among health workers of different levels.

Progress and achievement:

A National Working Group (NWG) on PAL was established in August 2007. In order to gain commitment and develop consensus sensitization meetings were held with policy makers and managers.

The PAL guideline and training materials were adapted and finalized after review by PAL NWG.

Smoking cessation module was included separately for health workers. The PAL OPD register were escape because all the information of PAL OPD are came out by general OPD register. Smoking cessation recording register is continuing use in OPD to record the respiratory cases along with smoking status and progress of smoking cessation.

Peak Flow Meter and other equipments including drugs and others logistic were supplied to all health facilities in the PAL implemented districts. Specially Spiro-meter were supplied to the hospital for measurement of Lungs capacities.

So far PAL coverage in 14 districts in the country and total 434 of health care providers were trained on Practical Approach to Lungs health activities and they implemented the PAL activities in their health institutions.

Coordination among NTP and HMIS to integrate PAL recording and reporting system is on going. Continuous supportive supervision and monitoring are needed to sustain the project.

The Major activities planned for next year are:

1. Conduct orientation workshop for FCHVs
2. Conduct Trainers training (TOT) to the districts trainers
3. Conduct PAL training Basic Health Staff (Hospitals, PHC, HP and SHP)
4. Conduct PAL training for MCHWs/VHWs (HP and SHP)
5. Conduct PAL refresher training for MCHWs/ VHWs (HP and SHP)
6. Conduct refresher training for health care providers

Advocacy, Communication and social Mobilization (ACSM)

Background:

The Government of Nepal, National Tuberculosis Center developed a comprehensive National strategy plan (2010-2015). The New Strategy builds on the previous national strategy and outlines enhanced and more focused commitment for tackling the TB epidemic, consistent with new STOP TB strategy and Millennium Development Goals in line with the Stop TB Partnership targets. NTC is committed to adopt and implement all six additional elements in order to reduce the burden of TB by 2015. The new strategy was developed with participation of key stakeholders, including development partners and TBCN.

Ensure access to quality treatment, diagnostics, ACSM, DR case management, Public Private Mix and TB-HIV care and support services for infected, affected and vulnerable groups in Nepal within the context of a comprehensive response to HIV and AIDS.

The ACSM intervention approach focusing on improving case detection and treatment adherence, combating stigma and discrimination, empowering people affected by TB and mobilizing political commitment and resources for TB.

These challenges will not be met without far greater prioritization and improvement in TB-related communication activities. In addressing each of these issues, there are strong organizational synergies with efforts to combat HIV/AIDS. To cope above mentioned situation, the following activities have been planned under the ACSM in National Tuberculosis Programme, Nepal.

ACSM Programme activities:

Policy and political commitment

NTP and Partners developed ACSM policy/ guidelines in 2009. NTP and Partners will hold regular orientation for politicians including Parliamentarians, Members of National Planning Commission, decision makers, technical & donor agencies. On World TB Day, NTP will advocate to policy makers and community people.

Capacity development

NTP will develop the capacity of health care providers/volunteers working in Government, NGOs and CBOs in districts with low CDR through the following activities:

- Revitalizing Health Facility Management/DOTS Committee
- ACSM training for health care workers, school teachers, female community health volunteers (FCHVs), and NGO/CBO workers, etc.
- Mobilize cured TB patients (TB patient club) to motivate suspect TB patients to attend DOTS services and encourage and support TB patients and their families to complete treatment
- Train/orient health workers and peer educators (community volunteers) on effective communication with patients for improving interpersonal communication
- Orient local NGOs, CBOs, Civil Society members on TB, TB/HIV
- Conduct patients empowering activities to reduce discrimination and stigma
- Conduct meetings for peer education to teachers, students, self-help groups
- Conduct TB, TB/HIV orientation to civil society members, community leaders and HIV related Organizations

Community awareness

Community awareness activities will be targeted to vulnerable groups to increase case finding among: migrants; slum dwellers; factory workers; displaced persons; street children; HIV positive people; and other at risk groups. Planned activities include:

- Orientation in slum areas, factories, cross-border populations, migrants, displaced

peoples groups, refugee camps, monasteries, homeless, etc.

- Orientation in school health programmes
- Orientation to transport workers
- Street drama
- Folk songs "Lok Dohari" "Teej songs"
- Newsletters.

Behavioural change communication (BCC)

BCC includes:

- Development of IEC materials
- Mass media activities: broadcasting TB related messages through radio, FM, TV, etc
- TB messages in newspapers (advertisements, letters to editor of national newspapers)
- Press conferences and/or workshops for journalists at central, regional and district level
- Celebration of World TB Day (24th March)

Achievements of financial year 2068/69

Under the above mentioned ACSM activity concept, the following activities were carried out during financial year 2068/2069

- Organised interaction programme with journalists to advocate TB progrmame at regional level
- Celebrated World TB day on 24th March 2012

- *Organised big social event at central level*
- *Organised east to west awareness campaign through motorcycle rally – collecting water from Mechi river and puring on Mahakali river.*
- *Organised TB Cultural programme for TB awareness by fmous national level singer at Basantapur durbar square and Lalitpur durbar square.*
- *Organised big rally at Nepalgunj and awarded to Mr. Chandra Bahadur Khatri, Guinness World Record Holder as World Shortest Man.*
- *Awared 5 health workers of each region who gave valuable contribution for TB Control programme.*
- *Displayed TB/HIV message board in various places.*
- Broadcasted TB/HIV messages through National Television, Radio and FMs.
- Carried out monitoring activities of ACSM activities
- Revised/developed TB posters, pamphlets, leaflets etc and distributed them to the districts
- Continued skill development training to DR-TB patient as pilot project
- Carried out many different advocacy, communication and social mobilization activities in the districts by the stakeholders
- Organised ToT on ACSM at national level
- Organised TB orietation programme for parliament members
- Develop and distrubiton yearly planner and calander with TB messages.

Planned ACSM activities for financial year 2069/70

- Advocacy campaign to media people
- Develop radio jingles for national levels radios and FMs
- Develop, print and distribute TB-IEC materials to the districts
- Broadcasting TB messages through national FMs
- Organise various community empowerment training, orientation, interaction meeting etc.
- Advocacy campaign to Parliament Members.
- Organise ACSM TOT at regional level.
- Revise ACSM policy and guideline.
- Develop TB awareness movie.

7. NTP Partner Organization

International Collaboration in TB Control

The National Tuberculosis Programme benefits from the help of several international partners.

LHL International Tuberculosis Foundation has supported the NTP through the provision of funds for training, supervision, monitoring and evaluation, quality control, empowering TB patients and community people through different orientations, skill development training and health communication and research activities.

The World Health Organization (WHO) supports TB Control in Nepal by providing technical support, staff training, and research activities such as surveillance of multi-drug resistance and HIV-TB co-infection and logistic support for procurement of first and second line TB drugs.

The SAARC Tuberculosis Center (STC), located in the NTC has been providing technical assistance and close cooperation to the NTP in DOTS expansion. The STC has played a vital role in many NTP activities such as producing skillful manpower, expansion of DOTS and training activities.

Global Fund against TB, HIV/AIDS and Malaria (GFATM), is an international financial institutions, providing funds to strengthen entire system of NTP Nepal since 2004. Around 80% budget of NTP covering by the GFATM.

Research Institute for Tuberculosis, Japan, is providing technical support to carrying out Prevalence Survey in Nepal since 2012. The development of survey protocol, define sample size and training to laboratory staff on culture has already completed by RIT. All the survey tools are going to be field tested in June 2012 with the support of RIT.

Involvement of Sub-Recipients in TB Control

The Britain Nepal Medical Trust (BNMT)

The BNMT was established as British charity in 1967 to assist the people of Nepal to improve their health through supporting sustainable health service delivery, capacity building and people's empowerment. It has played a vital role in establishing the National TB Programme and has been actively supporting the NTC in achieving the NTP's goal and objectives by implementing the TB control and prevention activities in Nepal. BNMT has been acting as a Sub Recipient (SR) of the Global Fund NSA grants through NTC (Principal Recipient). It has been implementing the activities in thirty-four districts of Nepal under this project

Friends Affected & Infected Together in Hand (FAITH)

FAITH is a non-profit making organization established in the year 2005, run by and for the marginalized groups such as people living with and affected by HIV and AIDS, people who use drugs and sexual minorities. It advocates for issues through various channels of mass media mobilization. Under the 'National Tuberculosis Programme (NTP), Nepal Support Project', FAITH implemented GFATM National Strategy Application (NSA) Phase 1 year 1 program as the Sub-recipient from 16th November 2010 – 15th July 2011. FAITH chiefly contributed in the national Tuberculosis program by implementing SDA No. 5 TB/HIV collaboration that aimed to decrease the burden of TB/HIV in the population affected by both diseases by ensuring effective collaboration between TB and HIV programmmes through effective coordination and delivery of collaborative services in three most high prevalence districts of Nepal – Kanchanpur, Doti and Accham.

Health Research and Social Development Forum (HERD)

HERD is an independent, non-profit, non-political and non-governmental organization established in 2004. Its aims to promote quality of life of people by supporting quality research and development works in health and social sector, which ultimately contributes to developing evidence-based policies and effective interventions to reach poor and vulnerable in community. HERD works

on the principles of equity and rights based approaches to health and social development by promoting equality, social justice, and human rights. HERD's core activity, research covers communicable disease control, patient-centered approach in health service delivery, health system strengthening, TB-HIV collaboration, social development, and advocacy, communication and social mobilization. Similarly, HERD involves in planning, implementation, monitoring and evaluation of disease control programme particularly TB and HIV/AIDS. In addition, HERD has been delivering basic health services targeted to the poor people in urban areas (including slums dwellers, migrants and homeless) by establishing and running "Manohara Community Health Center" in Lokanthali, Bhaktapur. By doing so HERD has been contributing to the priority areas as identified by the Nepal Health Sector Programme, in coordination with respective health programmes at different levels. HERD is one of the sub-recipients of NSA TB Grant funded by Global Fund for AIDS, TB and Malaria (GFATM).

Himalayan Social Welfare Organization (HSWO)

HSWO is a non-profit making non-governmental organization established in 1999 and registered at Lalitpur District Administrative Office.The organization is also affiliated to Social Welfare Council (SWC).The organization was established to support sustainable development with the aim of improving the quality of life of Nepalese people by enhancing physical, mental and social well being. The TB program was signed between NTC and HSWO on 24th January 2011 under the project of Advocacy Communication and Social Mobilization (ACSM) for TB/HIV of Parsa and Makwanpur districts of Nepal. The object of the program was to strengthen the capacity on TB/HIV co-infection management for PLHIV.

The International Nepal Fellowship Tuberculosis Leprosy Programme (INF)

INF Banke, TB Referral Center, was established in 1996 to provide specialized TB service for diagnosis, complication management for TB, DOTS service for first line, second line and third line TB patients. It has been providing inpatient and outpatient facilities for TB patients since 1996. Currently NTRC is also providing intensive care for TB/HIV co infected patients. Mainly poor & disadvantaged TB patients come from various parts of Mid and Far Western Region of Nepal including Indian people living near the border of Nepal.

Japan-Nepal Health and TB Research Association (JANTRA)

JANTRA is a non-profitable and public service oriented Non Government Organization (NGO) registered in Kathmandu District Administration Office. The organization was established with support from Research Institute of Tuberculosis/ Japan Anti-Tuberculosis Association (RIT/JATA). The key objective of JANTRA is to strengthen community support and its involvement to promote NTP tuberculosis control initiatives in the urban setting, marginalized population and hard to reach area in close conjunction with National Tuberculosis Center (NTC). JANTRA is a permanent member of the Nepal Stop TB Partnership (Tuberculosis Control Network, TBCN). JANTRA is also affiliated with Research Institute of Tuberculosis/Japan Anti-Tuberculosis Association (RIT/JATA) in Japan.

Nepal Anti Tuberculosis Association (NATA)

NATA is a non-governmental, non-profit making voluntary organization established in 1953 with a view to raising public awareness about Tuberculosis (TB) and adopting preventive and curative measures towards the control of the diseases. It is registered with District Administration Office, Kathmandu and affiliated with Social Welfare Council. Besides this, it is also affiliated with the International Union against Tuberculosis and Lung Disease (IUATLD), and one of the prominent members of the South East Asian Region (SEAR). NATA has successfully completed the activities allocated for the 1st year under the NSA grants. NATA mainly worked for DR -TB management and ACSM under the grant. Under ACSM activities, NATA and its district branches conducted all activities reaching the grass root and most vulnerable population with full coordination with relevant stakeholders whereas under DR TB Management program NATA conducted C/S trainings, relevant laboratory investigations for DR patient's, procurement of various health products and equipments, established hostel accommodation for DR TB patient's as well as economic support for them. Since establishment of NATA, it has formed 32 branches in Nepal and

plans to reach all over Nepal. The NATA plays an important role in controlling TB by providing treatment services and health education activities.

Naya Goreto (NG)

NG was established in June 2003, is a registered non profitable, non government organization working in the field of HIV and AIDS with affiliation to Social Welfare Council (SWC) of Nepal Government. It runs with a team of professionals having a long history of experience in the field of HIV, AIDS and Drug Use. From its establishment, it started with the gender specific advocacy programs for the drug users of Kathmandu valley. In addition, it provides different needs and rights based programs related to Drug, HIV and AIDS to its targeted groups involving ex-drug users, HIV infected and affected people in its various projects creating a common platform for ex-drug users, HIV infected and affected. Naya Goreto, on 25th January 2011, signed a contract with the National Tuberculosis Programme (NTP) for working in the field of TB, HIV and TB/HIV collaboration in implementing the project "Nepal National Strategic Plan 2010- 2015 - Implementation Stop TB Strategy". Naya Goreto was selected as one of the new Sub-recipient (SR) for assisting National Tuberculosis Center (NTC) in implementing the TB, HIV activities under Global fund for creating awareness in different parts of the country. The project duration is for three years which was commenced on 16th November 2010 and will end on 15th July 2013. The main objective of the project is to create awareness among the general people and related stakeholders on TB, HIV and TB/HIV co-infection issues. The project intends to aware the HIV infected people on TB as it is one of the most occurring opportunistic infections among the people with HIV. The project was implemented on four districts namely: Kathmandu, Rupandehi, Chitwan and Kaski.

Netherlands Leprosy Relief (NLR)

NLR is an INGO which was established in 1967 as a private initiative initially supporting leprosy control activities in Tanzania and Nepal. NLR in order to raise funds & provide technical support to the leprosy control activities in Nepal started in 1985. Since then this project continue support in east. In 1991 this project was extended to Far-west Region. The project had an opportunity to assist the Government of Nepal in TB/Leprosy control activities in this region. Tuberculosis is a major public health problem in Nepal. NLR assisted the National Tuberculosis Program in undertaking a joint TB/Leprosy initiative. The National Tuberculosis Program implemented DOTS as a treatment strategy since1996. DOTS are implemented in all nine districts of the region. Netherlands Leprosy Relief (NLR) is assisting to the national tuberculosis program in the far-west region since 1995/96 to achieve objectives formulated by NTP. NLR is acting as a supporting partner of the regional health service directorate for the implementation of tuberculosis program in the region.

The National Federation of Women Living with HIV & AIDS (NFWLHA)

NFWLHA is a national network of organizations and individuals working for HIV infected and affected women and their children. NFWLHA, formerly the Women's Network against HIV & AIDS (WONAHA), was established in 2006. It seeks to build the capacity of our member organizations so that they are better able to empower women living with HIV and AIDS (WLHA). Currently, NFWLHA has thirty two (32) member organizations representing NEPAL's five development regions.

The project entitled 'National Tuberculosis Programme (NTP), Nepal Support Project', largely funded by Global Fund under National Strategic Application (NSA) runs for 5 years initiating its implementation from 16 November 2010. National Federation of Women Living with HIV and AIDS is one of the Sub-recipients for the implementation of the project activities under Service Delivery Area (SDA) 5 TB/HIV Collaboration and SDA 8 Advocacy, Communication and Social Mobilization (ACSM) in 6 districts of Nepal under Principle Recipient (PR) National Tuberculosis Center (NTC). The objective of the TB/HIV Collaboration is to decrease the burden of TB/HIV in the population affected by both diseases by ensuring effective collaboration between TB and HIV programmmes through effective coordination and delivery of collaborative services. The targeted districts for the implementation of the project activities are Sankhuwasabha, Jhapa, Morang, Dailekh, Dang and Banke.

Investing in our future

The Global Fund

To Fight AIDS, Tuberculosis and Malaria

There is a long standing history of partnership and support available to NTP from international and national non government organizations (INGOs and NGOs), bilateral and multi lateral agencies, and research institutions for TB control in Nepal. This collaboration and assistance include financial assistance, technical assistance, materials in kind, diagnostic and treatment services, research, and management support.

Nepal's Ministry of Health and population is substantial grantee of Global Fund to fight against AIDS, tuberculosis and Malaria. National Tuberculosis Centre (NTP) has been working as an implementing partner of GFATM since 2005. NTP Nepal has well experienced and awarded by GFATM Round 4 and Round 7. NTP Nepal is receiving funds from the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM) through National Strategic Application (NSA) grant in 2010 for 3 years as of Phase 1 and to date GFATM is only significant funding contributor to fight tuberculosis in Nepal. GFATM is the main source of financing for NTP, contributing 83% (of the total NTP budget. For 2011/12, the Government of Nepal (GoN) contribution was 13% and others (WHO, LHL) contributed 4%. The NTP partners play a significant role, as 29% of the GFATM NSA budget being allocated to the Sub-recipients (SRs), compared to 71% to NTC and other government health institutions. The key activities through GFATM are: Peruse high-quality DOTS expansion and enhancement, address TB/HIV, DR-TB and other challenges, Contribute to health system strengthening, Engage all care providers, Empower people with TB, and communities, Enable and promote research.

National Strategic Application (NSA)

The National Tuberculosis Programme (NTP) has been following the 10-year 'Long Term Plan, July 2002 to June 2012. However, in 2006, the NTP adopted the Stop TB Strategy, which recommends activities not covered by the Long Term Plan. After that, National Strategic Plan as an new funding approach, July 2010 to July 2015, utilizes the initiatives of the Stop TB Strategy to increase case finding in Nepal, and hence to reach the NTP Goal: to reduce the mortality, morbidity and transmission of tuberculosis until it is no longer a public health problem. It was also designed to further facilitate alignment of Global Fund financing with country priorities within the framework of a country's national strategy- such as the national HIV/AIDS, Tuberculosis and Malaria strategy.

In 2008, Global Fund Board decided to implement the NSA approach through a phased roll-out, beginning in 2009 with a 'First learning Wave' of limited scope.The Global Fund announced the Second Wave NSA in January 2011. As with the First Wave, the number of countries participating in the second Wave is limited, in order to draw further lesions to guide the broad roll-out of NSA in the Future.

Objectives of National Strategic Application 2010-2015

1. To increase the case detection rate to 82% nationally and at least 70% in all districts by 2015.
2. To achieve and maintain treatment success rates of 90% by 2015 nationally and 85% minimally in all districts.
3. To expand and maintain the quality and capacity of the NTP & partners laboratory network and to build up the capacity of the NTC Laboratory to act as National Reference Laboratory.
4. To improve the quality of diagnosis and treatment of common respiratory illnesses in health care (HC) settings and increase TB case detection through expansion of National Practical Approach to Lung Health (PAL) initiative.
5. To decrease the transmission of TB including Multi Drug Resistant TB in congregate and health care settings through implementation of National Infection Control Policy.
6. To decrease the burden of TB/HIV in the population affected by both diseases by ensuring effective collaboration between TB and HIV programmes through effective coordination and delivery of collaborative services.

7. To reduce the mortality, morbidity and transmission of DR TB through effective management.

8. To engage public and private health care providers to ensure provision of quality TB services in line with NTP policy and International Standard of TB Care (ISTC).

9. To increase case detection rate to 82% by 2015, with particular emphasis on under-reached and high risk groups, through increased awareness at all levels and to increase the treatment success rate to 90% through improved community involvement and support.

10. To further improve the quality of care for people with TB and to improve implementation, performance and effectiveness of NTP approaches and services.

11. To maintain the routine and "operational research" based monitoring and evaluation system within NTP for performance assessment, and to introduce timely trimesterly comprehensive district and health centre feedback systems.

National Strategic Application (NSA) Approach

It was developed in response to county requests for more streamlined funding mechanisms and as part of the Global Fund's commitment to the Paris Declaration on AID Effectiveness and the Accra Agenda for action. A country's national strategy and its key accompanying documents such as the operational plan provide the long-term vision and specify the objectives, priorities, activities and implementation arrangements that underlie program delivery. Increasingly, donor, technical partners and countries are seeing this set of national strategy documentation as the basis around which they should align and harmonize their actions.

In this sprit, Global Fund's NSA approach takes as its core a country's national disease strategy documentation. Additionally, Service Delivery Areas (SDAs) were developed to meet the challenges and constraints of the National TB Program in line with the Stop TB Strategy. Under this approach, the Global Fund has supported to strengthen the following Service Delivery Areas (SDA) of national Tuberculosis Program, Nepal for 2010-2015

1. Improving Diagnosis
2. High Quality DOTS
3. Laboratory Network
4. Health System Strengthening
5. Practical Approach to Lung Health (PAL)
6. Infection Control
7. Respiratory Hospital
8. TB/HIV collaboration
9. DR TB Management
10. Public Private Mix (PPM)
11. Advocacy, Communication and Social Mobilization (ACSM)
12. Operational Research
13. Monitoring and Evaluation
14. Program Management and Administration

LHL INTERNATIONAL TUBERCULOSIS FOUNDATION, NORWAY

1. Background

In 1994, Government of Nepal requested LHL to assist the NTP with support for a national training and supervision activities. Since 1995, LHL has been supporting the NTP in Nepal specially focusing on capacity building, training and supervision activities at various levels. The Ministry of Health and Population (MoHP) and LHL signed a four-year co-operation (1995-1998) and further five-year co-operation (1999-2003, 2004-2008 and 2009-2013) agreement regularly, with a possibility of extension. LHL, in collaboration with the Union, has served as a technical advisor for the development of the programme. The objectives of the LHL for supporting NTP's are;

- Providing instruction and training to those responsible for the training at the national, regional and district level, who in turn are to train health personnel.
- Carrying out supervision from central, regional and distrıct level and integrating training within the supervision process of the NTP.
- Decentralizing the training and supervision to the regional and district level. This includes supervision, training, and financial responsibilities.

2. Programme/Service Delivery Areas

LHL has been supporting in following areas of NTP.

- Printing of information materials
- Human resources (local personnel)
- Logistics support (computers and telecom)
- Administrative support
- Training local personnel
- Empowering patients and communities/ advocacy focusing to Skill Development and health communication
- Monitoring, supervision and evaluation

3. Summary of key progress & achievements during January - December 2012

Printing of information materials

As per the need of NTP, number of copies of TB modules, manuals, reporting forms and formats, TB registers and other required forms and formats were produced, printed and distributed to the regional and district offices of the country. Those materials really helped to maintain quality of NTP in Nepal. Similarly, 10,000 TB booklets were also printed and distributed to TB patients, health workers, health volunteers and inmate of Kathmandu valley. This evidence based document provides all the information requirements of TB patients.

Training local personnel

Three days basic DOTS training to medical doctors organized at NTC training building in January 2012. Twenty six medical doctors from all over the country participated in the training. Among them, twenty two were male and four participants were female. This training helps to enhance the quality of DOTS programme. The numbers of DOTS training to health care providers, DOTS orientation to nursing staff and refresher training to health workers were conducted by Regional Health Directorate offices in all over the country.

Similarly, three participants from Ministry of Health and Population and National TB Centre; participated a union world conference on TB and Lung Health in Kuala Lumpur, Malaysia on November 2012

Empowering communities/advocacy

With the support of the LHL-International Norway, the NTP has been implementing health communication project in the country as pilot since February 2010. The project is divided into four phase; phase 1- booklet development, phase 2- health communication training to health workers, volunteers and distribution of TB booklet to concerned people, phase 3- regular monitoring and supervision and

measure an effectiveness of the booklet and phase 4- advocate the outcomes at all levels. As a second phase of the project, NTC organized TOT on health communication to health workers working in TB from 7th-11th May, 2012 at Kathmandu. 20 participants (17 female and 3 male) from Urban Clinics participated in the training. The follow-up workshop on health communication with same participants was also organized to share their and TB patient's behavior change on communication practice. Similarly, the second training on health communication to health workers of Biratnagar Urban Health Centre working in TB was organized from 26 to 30 December 2012.

Similarly, Fostering Health and Livelihood Status of Drug Resistance Patients of Eastern Development Region (EDR) Nepal's project was piloted at Nepal Anti-TB Association (NATA) Biratnagar with the financial and technical support of LHL since May 2009. This project is continuously running at NATA, Morang. This year, the training need assessment of patients carried out and organizing candle making, sewing and cutting, bamboo stool making, driving and beautician trainings. They have also formed their patient's committee and been mobilizing seed money to generate their income to have nutritious foods.

Evaluation

A team of LHL Norway visited Nepal in 26 November to 6 December 2012 to review the progress of NTP Nepal and made following major recommendations;

The MOHP should ensure funding for TB control on a long term basis; the NTC should pilot community-based DOTS in some areas, NTC should establish surveillance of cases of TB and DR-TB in health workers, TB-IC guidelines need to be distributed to facilities, particularly DR-TB treatment centres and hostels, the Skills Development project should be introduced in more DR-TB hostels, In addition to this, team has recommended to the Ministry of Home Affairs, Prison Department to screen all new prisoners for TB, prisoners in with pulmonary TB and prisoners with HIV should not be mixed in prison sick bays and DOTS in prisons should be observed by health workers

4. Service Delivery Areas/Planned Activities for January-December 2013

The LHL support will be focused in the following areas for January-December 2013

- Printing of information materials
- Capacity building of health care providers
- Empowering patients and communities/ advocacy (Focus to skill development training to TB patients and health communication project)
- Evaluation on measuring effectiveness of TB booklet in Nepal
- Monitoring, supervision and evaluation

World Health Organization (WHO)

WHO is the key technical partner of Nepal NTP. It provides technical support through a team made of one full time international TB expert, one programme assistant and one administrative assistant at the NTC. WHO has been assisting NTP in the development of policy, strategy and guidelines. WHO has also been supporting NTP to roll out the Stop TB Strategy through capacity building of its staff, procurement of first-line, second line and Pediatric Anti TB drugs, research including surveillance of multi-drug resistance and HIV-TB co-infection monitoring and evaluation. WHO is also providing assistance to NTP for financial and technical resource mobilization. WHO is instrumental in establishing coordination between NTP and its national and international partners.

WHO provided technical and financial support for the Development and printing of DR TB Guidelines in consultation with the International Experts and DR TB TAG members. Similarly, one of the key documents of NTP, The NTP General Manual was also revised in consultation with various experts. WHO has also been assisting in the development and printing of NTP Annual Report which is one of the main advocacy materials for NTP.

The following WHO missions were carried out for this reporting period:

Green Light Committee (GLC) Monitoring Mission (2-8th May 2012): The annual GLC monitoring mission took place in May 2012. Dr Michael Rich was the mission leader, assisted by Ms Minda Nicolas. DR TB Technical Advisory group meeting was also conducted during his visit. The mission is very crucial for NTP in terms of technical advise and DR TB program evaluation. Some of the recommendations made by the mission have helped improve the performance of PMDT and prepare a detailed expansion plan for the next three years.

Practical Approach to Lung Health (PAL) Mission (12-16thSept 2011): A WHO HQ expert on PAL, Dr Salah Ottmani visited NTP in September 2011

to access the PAL program in Nepal. The mission identified the need to strengthen the capacity of NTC by appointing a PAL officer in order to promote and coordinate the consolidation of PAL in the designated districts and prepare the ground for further expansion. Also recommended to have annual external monitoring missions to to evaluate the progress made.

Public Private Mix (PPM) Mission (26-30th Sept 2011): An International expert on PPM, Dr Mukund Uplekar visited NTP in September 2011 to access the PPM activities in Nepal. The recommendations made at the end of the mission were about appointing a PPM officer at NTC and setting up a National PPM Coordination and Advisory Committee; establishing a standard recording & reporting system to measure the impact of PPM on case detection and case holding; engage non-NTP partners, particularly NGOs, in the implementation of PPM activities; collaborate with medical associations, non-MoH health services (military, police, prisons, etc.) in order to achieve higher TB control coverage; introduce new technologies (mobile phones, internet) and innovative approaches and to promote operational research on most suitable ways to deliver quality TB care.

Development of Guideline on Management of TB in children 13th Nov-4th Dec 2011): An international consultant Dr Lungten Wangchuk visited Nepal in December 2011 to provide technical assistance to develop a guideline on management of TB in children. The guideline was included in the NTP General Manual.

During this reporting period, Two WHO Regional Workshops were conducted in Nepal with the support of WHO Regional Office. They are:

Regional Workshop on Public Private Mix Practical Approach to Lung Health in TB Control, Kathmandu, Nepal, 19 to 23 September 2011. Along with the 11 member countries, various NTP staff also participated this workshop

Regional Workshop to accelerate the implementation of TB-HIV Collaborative activities in South East Asia Region, Kathmandu, Nepal 9-11 July 2012. Three NTP staff participated in this workshop.

WHO in collaboration with NTP also organized a fellowship program on Practical Approach to Lung Health (PAL) from 6-10th June 2011. In this regard, two Sri Lankan participants visited Nepal to observe and learn the PAL implementation in various places of Nepal.

Procurement of anti TB drugs: WHO procured first line, second line and pediatric TB drugs from Global Drug Facility as per program need. WHO is responsible for quantification, selection, timely communication, custom clearance and delivery of drugs to NTC services. In addition to this, regular monitoring of drug shipments and Price Quality reporting to Global Fund is also taken care by WHO.

Tuberculosis Control Network (TBCN) Meeting:

WHO has been organizing the Tuberculosis Control Network (TBCN) meeting on quarterly basis in the capacity of the Secretariat of TBCN Forum. This network is the equivalent of a National Stop TB Partnership where all the NTP partners and technical experts from related field share the progress, plans and challenges in their respective area of work. The TBCN also provides the platform for endorsing major decisions in consultation of all the partners.

8. Key Constraints and Challenges

The Nepal NTP continues to face several challenges and constraints, which influence the ability to expand and sustain the STOP TB Strategy. Following are the key challenges and constraints faced by the NTP in order to reach intended goals and targets.

SN	Issues	Recommendations	Responsibility
1	TB Program in hard to reach area and urban slum. (Low case finding)	• Intensify case finding • Increase microscopy center • Mobile camps • PAL approach • ACSM approach	NTC/RHD/DHO
2	Infection Control	• Apply infection control program in each health facility	NTC
3	TB/HIV collaboration	• Implement 3I • Intensified case finding • Among HIV Positive • Infection Prevention • IPT Therapy	NTC/NCASC
4	DR TB Program	• Develop DR expansion plan • DST test for retreatment cases. • Inpatient facility in five region hospital	NTC / DOHS/ MOHP
5	PPM	• Develop PPM program • Orientation private sector. • Develop recording & reporting	NTC
6	District TB/Leprosy/HIV clinic	Provide staff	NTC

9. NTP Partners Report

The Britain Nepal Medical Trust (BNMT)

1. Background

1.1. Introduction:

BNMT was established as a British charity in 1967 to assist the people of Nepal to improve their health through supporting sustainable health service delivery, capacity building and people's empowerment. It has played a vital role in establishing the National TB Programme and has been actively supporting the NTC in achieving the NTP's goal and objectives by implementing the TB control and prevention activities in Nepal. BNMT has been acting as a Sub Recipient (SR) of the Global Fund NSA grants through NTC (Principal Recipient) from 16 July 2010. It has been implementing the activities in forty districts of Nepal under this project.

Tuberculosis is still a major public health problem in Nepal; however, with the full coverage of DOTS Programme in the country, the prevalence rate of TB is in declining trend. As per the WHO statement, TB is a global health concern, because it is still one of the top three killer diseases world-wide. Due to widespread poverty, illiteracy, migration and meager health system, there is limited access to TB cure for those who are poor, socially disadvantaged and marginalized. Therefore, BNMT vows to continue its support to the National Tuberculosis Programme (NTP) in its strategic period during 2010 to 2013 in pursuance of achieving the goal of the GFATM NSA project i.e., *"To reduce the mortality, morbidity and transmission of tuberculosis until it is no longer a public health problem" and to contribute to the attainment of the NTP target of case detection rate of new smear-positive cases of 82% by 2015; and to reach and maintain a treatment success rate of at least 90% by 2015*. In this period, attempts will be made to support the NTP in order to strengthen the TB programme of Nepal to achieve the MDG towards elimination of TB.

1.2. Vision, Mission, Purposes and Approach of BNMT

Vision

To improve health and wellbeing of Nepali people.

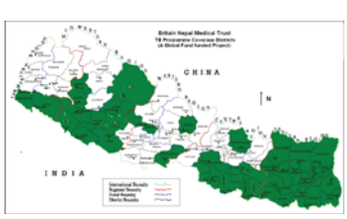
Mission

Working together with stakeholders in ensuring equity and access to quality health service and better livelihood options for disadvantaged people.

Purposes

- To contribute to institutional strengthening process by enhancing the capacity of the health service providers of government and nongovernmental organizations at all levels.
- To facilitate empowerment of people at the community level in ensuring access to and utilization of quality health services.
- To contribute to increasing livelihood options to the people at the community level for improved health conditions.
- To enhance BNMT's organizational capacity in managing its overall operations.
- To strengthen coping strategies and resilience of the people to face effects of environment and disaster.

2. Programme Coverage / Service Delivery Areas



It has been implementing the activities in different districts of Nepal under this project. "As per the agreement between NTC and BNMT, different activities have been performed under the following Service Delivery Areas (SDA) namely

(ii) High Quality DOTS (iii) Laboratory Network (iv) Health System Strengthening (v) TB/HIV Collaboration (vii) Public Private Mix (PPM) (viii) Advocacy, Communication and Social Mobilization (ACSM) and (ix) Operational Research.

3. Summaryof key progress and achievements

BNMT has been successful to conduct 546 activitiesout of the 605 target activities in the second year. However, few activities could not be implemented due to various reasons such as delay in fund release, "Bandha" and strike called by various groups and also some of the planned activities, especially on TB/HIV collaboration could not be performed due to the budget withheld. Even with the several hurdles in program implementation, BNMT has been successful in achieving more than 80% both at programme level and at expenditure level.

Summary of the Target versus Achievement at the activity level has been presented in the table below

Table: Target versus Achievement

SN	Service Delivery Areas	Annual			No. of people trained
		Target	Achievement	%	
1	High Quality DOTS	1	1	100%	1
2	Laboratory Network	98	96	98%	62
3	Health System Strengthening	123	105	85%	1880
4	TB/HIV Collaboration	9	9	100%	73
5	PPM	84	70	83%	1084
6	ACSM	288	263	91%	623
7	Operation Research	2	2	100%	27
	Total	**605**	**546**	**90%**	**3750**

3.1 Issues/challenges

1. Strike and "Bandha" from various groups affected smooth implementation of planned activities.
2. Time constraints to implement TB control activities due to Measles, Rubella Vaccination Campaign and Mass Drug Administration for anti-filariasis.
3. Budget withhold for some activities in the middle of the implementation phase.
4. Lack of budget to implement the planned activities at the beginning of the year.

3.2 Recommendations

1. Release of budget in time so that the activities can be performed in enough space of time.
2. Budget withheld in the middle of the implementation phase affects the overall implementation cycle therefore, it would be better if budget would not be hold for the planned activities.
3. Provision of follow up activities would have been better to access improvement after skill development and training both at beneficiary and service provider level.
4. Issuance of standard monitoring guidelines from PR to SR is desirable to ensure quality monitoring.
5. Without timely work plan allocation and disbursement of the budget, it would be very difficult to accomplish approved annual programme ensuring quality implementation deriving best value for money.
6. The budget allocation for the community level ACSM activities is very low and there is difficulty in implementing these activities in remote districts. As such, budget provision for these activities needs to be increased.

3.3 Conclusion

BNMT has made remarkable achievement in the implementation of NSA Year II activities despite the various challenges stated above. It was made possible through the close coordination with the implementing partners and stakeholders. However, few activities could not be performed due to various reasons such as delay in fund release, "Bandha" and strike called by various groups etc. Some of the planned activities, especially on TB/HIV collaboration could not be performed due to the budget withheld. For the purpose of strengthening the Eastern Regional Quality Control Centre, NTC replaced the old microscopes which encouraged the staff to maintain the quality of training for laboratory staff. In order to achieve effective and efficient service delivery of the planned activities, fund of the approved work plan should be provided in time. The planned budget should not be withheld in the middle of the implementation phase which affects the overall implementation cycle. Despite all this, the good thing is the fact that BNMT has been successful in achieving more than 80% both at programme level and at expenditure level.

Friends Affected and Infected Together in Hand (FAITH)

Background

Friends Affected and Infected Together in Hand (FAITH) is a non-profit making organization established in September 2005, run by and for the marginalized groups such as people affected by HIV, people who use drugs and sexual minorities.

Vision

To create a place where every individual can live with dignity

Objective

To create an environment ensuring the fundamental rights of people especially women and children from disadvantaged, marginalized and vulnerable groups to live a free and dignified life.

Activities

FAITH implemented GFATM National Strategy Application (NSA) Phase 1 year 2 program as one of the Sub-recipient from 16th July 2011 – 15th July 2012 under the 'National Tuberculosis Programme (NTP), Nepal Support Project'.

- TB/HIV collaboration – covering 8 districts namely Kanchanpur, Doti, Accham, Banke, Dailekh, Bardiya, Kailali and Dhanusa.
- Advocacy, Communication and Social Mobilization (ACSM) - Covering all Nepal.

Major outcomes:

- Total 1275 community members including volunteer and support groups, policemen, VDC Members and DOTS committee, religious leaders, mother and women's groups, school and college students were orientated on TB-HIV.
- Total 91 BHS staffs (DOTS and VCT centre) and NGOs received basic TB/HIV training.
- Total 45 health workers working in HIV/AIDS (public NGOs, private sector) received basic TB training.
- Total 42 PLHIV received training on TB/HIV and treatment literacy.
- Total 190 people tested for TB in Doti and Kailali district and 56 new TB positive cases were identified.
- Total 478 TB patients tested for HIV and 9 new HIV positive cases were identified.
- 26 participants working in NGO's/CBO' participated in the advocacy program.
- Six street dramas were organized and estimated 2000 community people observed it.
- Two support groups with seven members in each group were established.
- 9 TB-HIV clients received seed money for their sustainable income.
- 16 TB/HIV clients, HIV positive and their family members received vocational (computer and sewing) training.
- 5400 pcs posters, 13500 pcs brochure, 40500 pcs leaflet, 27000 pcs sticker, 5 pcs hoarding board, 1350 pcs flex print, 1350 pcs Flip cloth chart, 7200 pcs monthly planner, World TB day related 3000 pcs posters and 9000 stickers were developed. The materials were distributed in 63 districts of Nepal and also to all SRs, other NGOs and external development partners (EDPs).
- 12 radio programs was developed and aired weekly through Nepal FM network. One television program was aired in TTV on the occasion of World TB day, 2012.
- One article on TB/HIV was published in each development region - Kailali, Chitwan and Nawalparasi, Pokhara, Nepalgunj and Biratnagar.
- A television PSA "World TB day special" is developed and provided to another SR "NATA" for the broadcasting.

- Far –west related posters were developed in three languages - Tharu, Doteli and Acchami language and distributed.

Activity	Target	Achievement
5. TB/HIV Collaboration		
Basic TB/HIV training to BHS staff (DOTS and VCT centre) and NGOs	90	91
TB/HIV training to PLHIV group through their existing network	30	32
Treatment literacy and treatment adherence training to TB/HIV co-infected.	10	10
Basic TB training for health workers working in HIV/AIDS (public NGOs, private sector)	35	35
TB/HIV orientation to volunteers and support groups	30	30
Carry out intensified TB case finding among HIV vulnerable groups	190	190
Carry out intensified HIV case finding amongst all TB patients in target district at registration	478	478
TB/HIV advocacy campaign for NGOs/CBOs working in HIV	25	26
TB/HIV patient/client to patient/ client education	60	30
TB/HIV orientation to village Development Committee members, DOTS committee	100	101
TB/HIV orientation to religious and faith healers	125	124
TB/HIV orientation to women and mother groups	100	100
TB/HIV orientation to school and college students	900	904
Street drama on TB/HIV by patient infected with TB/HIV	6	6
TB/HIV orientation to army and police	35	45
Establish support groups for TB/ HIV co infected client (self help group)	2	2
Income generation and socio economic rehabilitation	9	9
Vocational training	16	16

SDA No 8 Advocacy, Communication and Social Mobilization (ACSM)		
Develop IEC materials at national level and distribute to all 75 districts of Nepal	27	27
Broadcasting TB/HIV related messages appropriate for specific audience in appropriate time through mass electronic media eg, radio, FM, TV etc	15	12 radio and 1 TV show
Publish TB/HIV messages in newspaper (e.g advertisement, letter to editor in national newspaper) by conducting press conference or workshop for journalists	5	5
Develop visuals on TB and TB/ HIV for national and regional television network	1	1
IEC activities (development / printing of posters, leaflets etc specific to FWR)	1	1

Success stories

- Total 56 new TB cases were detected among HIV vulnerable groups. 9 HIV cases were identified among TB patients. Both TB and HIV case findings were carried strongly and cross-referral mechanism was established.

- 9 TB/HIV clients, HIV positive and their family members benefitted from the seed money to support their income.

- 16 TB/HIV clients, HIV positive and their family members benefitted through vocational training like computer and sewing to enhance their skill and earn a decent living.

- The IEC materials were successfully distributed at 63 districts of Nepal to create and increase awareness on TB and TB/HIV co-infection increasing case detection rate and treatment success rate.

Health Research and Social Development Forum (HERD)

Background

Health Research and Social Development Forum (HERD), established in 2004, is an independent, non-profit, non-political and non-governmental organization committed to promote quality of life of people by supporting delivery of quality health services and social development work. We work on the principles of equity and rights based approaches to health and social development. We promote equality, social justice, evidence-based policies and cost-effective interventions, towards improving the provision of quality health and social services to the poor and underserved.

VISION: A world that ensures good health and well-being of all people.

MISSION: HERD's mission is to promote quality health research and ensure sustainable social development to improve quality of life for all.

Aim and Objectives: The main aim of HERD is to promote: evidence-based policy development, quality delivery of basic health services, social justice and social development thus improved quality of life of people. We do this by conducting and supporting evidence-based research; improving demand for, access to, quality health services with greater involvement of communities, and community empowerment to ensure rights and responsibilities. We focus on the components of the health system and service delivery to reach the poor and vulnerable in communities.

Partners and Collaboration: National TB Control Programme; National Centre for AIDS and STI Control; Regional Health Directorates; District Public Health Offices; Municipalities and other local bodies, Academic Institutions, and communities are the national partners. HERD is one of the partners of COMDIS HSD research consortium led by the Nuffield centre for International Health and Development, University of Leeds, UK. It also works with WHO's Stop TB Partnership, IUATLD and other relevant international agencies.

Geographical Coverage: In 2011/2012, HERD implemented TB control activities in 17 districts: Kathmandu, Lalitpur, Bhaktapur, Chitwan, Parsa, Dhanusha, Tanahun, Kaski, Syangja, Palpa, Rupandehi, Arghakhanchi, Banke, Dang, Kailali, Achham and Baitadi.

1. Programme/Service delivery areas

HERD works in the following service delivery areas as a sub-recipient of GFATM NSA TB grant:

- High quality DOTS; Health system strengthening: PAL; TB HIV collaboration; Public private mix (PPM) in TB control; ACSM and Operational research.

Moreover, HERD is also involved in:

- delivery of essential health care services targeted to the urban poor including TB and DR-TB case management through Manohara Community Health Centre, Lukanthali, Bhaktapur
- programme-based OR together with the government health services to improve health service delivery;
- create demand for services together with community empowerment activities;
- development and implementation of accessible, cost-effective and user-friendly health services targeted to poor;
- community based interventions with a greater participation of communities;
- development and scale-up of best practices that influences national policy and health service delivery;
- capacity development of health workers and improve care across the sector.

2. Summary of key progress & achievements during FY 2068/2069

High quality DOTS: Revised NTP clinical manual incorporating different experts, clinicians' opinions

and updating new innovation of Stop TB strategy along with WHO's guideline. The revised draft copy is submitted to NTC.

PAL: conducted 2 situational analysis, 2 TOTs, 5 basic and 2 refresher PAL trainings to basic health staffs in process of programme expansion.

TB HIV collaboration: we implemented almost 95% (63/66) of the planned activities in 6 districts.

PPM: Activities were implemented in 13 municipalities of 10 districts. Activities ranged from central level coordination meeting to community level. More than 85% activities completed in PPM.

ACSM: About 92% of the planned activities were conducted for different target groups in 4 assigned districts.

Operational research and surveys: About 96% planned activities completed. The main conducted activities were; situation analysis for PAL in Baitadi & Tanahun and TB HIV in Arghakhanchi & Bardiya districts. Similarly conducted client satisfaction survey (CSS) identifying impact of TB service on TB patients and their families in Lalitpur and Kaski; analyze issues regarding cross border migration to develop strategies for their diagnosis and treatment in 6 indo-border districts. Organized research findings dissemination workshops at national and regional levels. Conducted other research relevant activities; organized comprehensive training on research proposal development, methodology and scientific report writing.

HERD printed TB HIV co-infection management refresher and PPM ISTC training manuals for HWs; ISTC booklet in Nepali language and referral and feedback forms.

Training database development: HERD has developed a comprehensive training database of NSA TB grant Y1 and Y2 to institutionalize the trend of systematic record keeping process of past training events. HERD has sent districts annual progress report based on the developed plan as well as list of health workers trained through different training for the review of HERD's performance in collaborative approaches as well as district's achievement in TB control programme.

Urban Health Care Services

HERD established Manohara Community Health Centre (MCHC) on 15th March 2008 and providing Essential Health Care Services targeted to the urban poor, slum dwellers, migrants, laborers and other service unreached groups. Manohara is the biggest slum in Nepal. Since the inception of the MCHC till the end of this FY, more than 25,000 people have utilized its services including TB diagnosis/treatment and DR TB treatment, majority of them represent the urban poor. In addition to its routine services, the MCHC conducts outreach clinics to bring services close to the needy people with a focus on women, children and marginalised groups.

3. Financial reporting

Under the NSA TB Grant Year 2 HERD received Rs 24,297,327 of which 85% was spent with >95% programmatic achievement.

4. Planned activities for FY 2069/70

Under the NSA TB grant, HERD plans to implement activities in 25 districts with few new districts. The volume and type of assigned activities differ according to service delivery areas.

In addition, HERD is planning to scale up its involvement in urban health service delivery with aim to improve access to EHCS for urban poor and unreached groups. This will be done in collaboration with respective municipalities and D/PHOs following the government urban health policy and strategies. Likewise, we plan to contribute developing patient supervision and support mechanism for DR TB patient inline with NTP's New Stop TB Strategy.

Himalayan Social Welfare Organization (HSWO)

Background

Himalayan Social Welfare Organization (HSWO) is a non-profit making non-governmental organization established in 1999 and registered at Lalitpur District Administrative Office with registration number 1128 (2056/10/05 BS). The organization is also affiliated to Social Welfare Council (SWC) with the registration number: 10098. The organization was established to support sustainable development with the aim of improving the quality of life of Nepalese people by enhancing physical, mental and social well being.

The HSWO is governed by Executive Board (EB) consisting of nine members elected every four years. The EB members take keen interest in the organizational activities and monitor field programmers to ensure quality delivery of results to the intended beneficiaries. In addition, the organization has number of professional members, representing different disciplines, who contribute to as and when needed basis.

HSWO has been working in the field of HIV/AIDS prevention, advocacy, capacity building through training to NGO staffs for sustainable development, empowering People Living with HIV and AIDS (PLWHA), sensitization Programme to transport workers and their union on HIV/AIDS and STD, and contributes to networking and campaign against STD/HIV/AIDS.

HSWO operated comprehensive package for internal and external migrant workers and their families at Dhanusa and Parsa districts from February 2006 to 2011, covering 25 VDCs including municipality and providing STI and VCT services by mobilizing 80-80 Peer Educators in each district. The project was funded by UNDP/DFID. HSWO implemented the program as a peer based approach and cluster base and closely works with peer networking and user groups (e.g. Women groups, Forest group, VDC level Health workers, Youth groups etc) because peers can understand their peers' vulnerabilities. Thus, by using their local language peers can give education about HIV/ AIDS/ STI and VCT, which was very much effective among target groups.

In collaboration with ILO/Nepal, HSWO was conducted a pilot project entitled "Reducing Vulnerability of Migrant Worker by Mobilizing Local Groups" in 6 each selected village development committees of Dhanusa and Parsa from 2010 to 2011. The objective of this program was to reduce the vulnerability of migrants' workers in foreign employment by raising awareness and empowering them through mobilization of local groups.

Base on experience HSWO interlink project with NTC for TB /HIV co infection program because in our study and observation most of the HIV positive had TB problem and it is very much important to refer to DOTS center for HIV people.

In collaboration with UNDP small grant HSWO conducting a project entitled ' Promoting Clean Energy Technologies as Livelihood Option for PLHIV in Dhanusa District and Gangabu Bus Park Kathmandu'. Which include construction of Bio - Latrine fed Bio- Gas Plant with supply of the gas to restaurant promotes Briquette making by involving PLHIV.

HSWO is initiating school education program to those children who are affected and infected by HIV/AIDS. This is totally charitable fund to contribute from each respective individual who really feel ownership to contribute tiny support to see significant changes, who loves children and want see bright future and want to bring smile on their face. Because they have rights to get proper care and love. The condition gets even worse when their parents die from AIDS.

VISION

Promoting Safe and healthy Society.

MISSION

Coordinate with Multi sector approach to empower to sustain their life and give right to live by mobilizing target group.

OBJECTIVES:

The objectives of the organization are to promote the following at local, national and international levels

- Health, education, sanitation and awareness creation regarding hygienic issues.
- Sensitize community member about HIV/AIDS and STDS and contribute in networking and campaign against STD/HIV/AIDS.
- Training of human resources required for sustainable development of the community.
- Income Generation Program for rural and urban poor communities.
- Environmental and conservation program.

Program coverage/Service Delivery areas:

HSWO has been implementing the activities in different districts of Nepal under the project as per agreement between NTC and HSWO. Different activities has performed under the following service delivery areas namely i) TB HIV Co-infection ii)Advocacy, communication and social mobilization (ACSM) in given districts Makwanpur, Panchthar, Birgunj, Bara, Taplejung, Udayapur, Sarlahi, Dhanusa, Morang, Rupandehi, Doti, Achham, Baitadi & Kathmandu.

Summery of key progress and achievement:

HSWO has been successfully conducted the given activities in year second. However few activities couldn't implement due to delay fund released and Banda called by different groups. The given program activities couldn't held due to budget hold .Overall HSWO has successfully achieving 97% in program implementation.

Target V/S Achievement has given in the table below:

SN	Service Delivery Areas	Tar-get	Achievement	No of people Reached
1.	TB HIV Co infection	168	156	5119
2.	ACSM	109	99	5158
Total:		277	255	10277

Issues/challenges:

- Because of delay disbursement of budget, it was very hard to mange and support finance at district level to conduct the activities.
- Lack of staffs in Programme.
- Lack of staff capacity development Training.
- Lack of coordination and communication with NGOs, CBOs and Govt. organization in district level.
- Lack of communication and coordination between partners.
- Lack of IEC material.
- In a VDC level it was difficult to get PAN bills.

Recommendations:

- Agreement and budget disbursement should be in time.
- Programme staffs should be increase in coming new project to handle district level activities.
- Mass media campaign like vehicle painting with message, Stall Hoarding board, and Bill boards should be adding in new program.
- Programme should be targeted to Industrial areas, advocate group, media people and journalist for sensitization on TB/HIV.
- Program should be implemented by mobilizing Peer Educator.
- Program shout be targeted in Industrial areas.

Conclusion

Base on given targeted, HSWO has accomplished and achieved 97% in Center and in district level. In center level HSWO successfully organized CA members Advocacy campaign in TB/HIV program and got mass commitment to involve in the field of TB and HIV. HSWO empower TB patients or HIV client or TB/HIV co infected people to sustain their life by distribute seed money and by giving vocational training. HSWO bring awareness in TB/HIV to mass group of people in program implemented district by showing street drama.

International Nepal Fellowship (INF)

Background:

International Nepal Fellowship (INF) is a Christian non-government organization. It has been working since 1952 in diverse field such as TB, leprosy, HIV , drug awareness, community health and development, supporting government hospitals in capacity development, organizing medical camps in remote places, working with displaced people and disable people of western and mid-western region of Nepal.

INF Banke Programme's Nepalgunj TB Referral Centre (NTRC) was established in 1996 to provide specialized TB service for diagnosis, complication management for TB, DOTS service for first line, second line (DR & XDR TB) TB patients. It has been providing inpatient and outpatient facilities for TB patients since 1996. Currently NTRC is also providing intensive care for TB/HIV co infected patients.

The fiscal year 2011-12 (2068-69) was a successful year the flow of patients was higher compared to last year and the trend showed that it has been increasing. The Centre has been providing excellent service for DR TB treatment in charity for the people and the work of INF has even been recognised by the world in this fiscal year by awarding the **"2011 stop TB Partnership Kochon Prize"** by WHO.

In the year 2011-12 we served around 39,000 people through OPD. The DR treatment success rate for this year is 83% which has been increased compared to last year. In our (26 bed) inpatient facility we had 58% bed occupancy and the average length of stay of patients is 9 days. From our behaviour change programme through counselling and others 70% patients changed their behaviour (adopting safety measures).

The major activities of Nepalgunj TB Referral Centre.

- TB suspects screening
- TB diagnosis
- TB case registration and TB treatment on DOTS for 1st line and 2nd line TB.
- VCT services for TB / HIV co-infected patients.
- Referral after diagnosis to the appropriate health facility.
- Counselling and advocacy of patients for appropriate care to another health facility.

- Health education to the people who gather in the OPD waiting hall, awareness raising activities

Activity	Target	Achievement	Comments
Carry out intensified HIV case finding amongst all TB patients in target districts at registration	880	579	All the TB cases were not tested for HIV in the first trimester as it was voluntary and we tested for them who were at the risk of HIV. All TB patients were tested compulsorily only from the mid of second trimester so the targets could not be met
Diagnose then refer to the nearest DOTS Centre 6.1.1a)	10980	14312	Numbers of TB suspect cases were increased due to specialised TB service we are providing. Moreover the targets were same as of previous years but the achievements were going up.
Admit non DR TB patients with complications, including TB/HIV co-infection	252	512	The INF TB Centre is only specialised TB Hospital in the region. It is charitable and quality services centre and no government hospitals and medical colleges easily admitted serious TB patients needing inpatient facilities. So increased flow of patients. Like other clinical activities the targets have not been reviewed since few years.

Activity	Target	Achievement	Comments
Admit DR TB patients with complication	41	78	Most of DR patients developed side effect of medicine and XDR cases have been staying due to no other facilities for them so increased number of admission.
Maintain hostel accommodation for DR TB patients being treated away from homes.	23	23	90 % of bed occupancy rate in both DR TB hostel

- Default chasing (Late patients tracing), Rehabilitation support service,
- DR TB hostel service for drug resistant TB clients
- TB. In-patients service, Laboratory service, Capacity building activities for medical and paramedical students.
- Charity / poor fund provision.

The key target and achievement of the year 2011-12 has been given below in the table.

Success Story

Sail Kumari became happy again

Mrs. Sail Kumari chaudhary had a happy family with husband, two sons and one daughter. Her family had good relation with villages and neighbours.

Her husband passed away 15 years ago. Then she had to take all the trouble to look after her family. Her children were still very young. Slowly, she became ill and was diagnosed Pulmonary TB 9 years ago. She was treated for 8 months with CAT I regimen at the local PHC and she got cured. After 6 months, she got symptoms of TB again. She was diagnosed TB and treated with CAT II regimen. She had sputum +ve even after 5 months of treatment. So, she was referred to Nepalganj TB Referral Centre, INF Banke in Nepalganj for DR TB treatment. Her sputum culture and drug sensitivity test showed DR TB. So, she was treated with DR TB treatment in our Centre. She was treated for 24 months with DR TB treatment Regimen. She got cured from DR TB finally.

However, her happiness didn't last longer. Her young son Mr. Surendra Chaudary was diagnosed DR TB. So, he was treated for 24 months. He also got cured. We (INF) supported for the education of Mr Surendra after he was cured from DR TB. Last year, he passed School Leaving Certificate. Sail Kumari have 2 bigahas land but she is unable to farming because she has no money for ox purchasing. Finally (INF) SUPPORTED to Mrs. Sail Kumari to buy a pair of Oxen. They are used to plough fields for farming. The oxen are used for farming and villagers also pay for the ox for the service which makes Mrs Sail Kumari an additional income.

Now, she is healthy and has a happy family. Her son Mr. Surendra is looking forward for further education and her happiness has come back again.

Financial report

In the fiscal year 2011-12 INF Banke programme's TB clinic did work well and we achieved more than we had planned. The budgeted budget from Global Fund was NPR 19,242,697 and we spent NPR 19,055,615. Besides this, INF used the money from its own resources to complete the plan given by Global Fund.

Issues/challenges

Some Issues or challenges have been given below.

- Under staffing compared to case load or work volume
- Targets have been set few years back and these have not been revised so need to reset target for some activities
- The grant is not disbursed in time so we face difficulty to continue the work

Conclusion

NTRC has been involved in supporting government health agencies in control of TB in the Mid-Western Region of Nepal. Despite different challenges, we achieved most of our targets with high achievement in the reporting year and well served the people in this region. This was possible due to continuous support and cooperation from NTC, Global Fund, RHD, DHOs, relevant government institutions, our partners and stakeholders. Therefore, we would like to pass our sincere gratitude to all of them and hope to have same sort of support and cooperation in future as well.

Japan Nepal Tuberculosis Research Association (JANTRA)

Background

Tuberculosis is one of the most widespread infections in Nepal, and poses a serious threat to the health and development of the people of Nepal. Despite almost 100% DOTS coverage throughout Nepal, the case detection rate of new sputum positive TB cases has remained at 7- % for the last seven years. The National Tuberculosis Programme (NTP) has been following the 10 year" long term plan", July 2002 to June 2012. However, in 2006, the NTP adopted the Stop TB Strategy, which recommended activities not covered by The Long Term Plan.

The National Strategy Application (NSA) is a new funding approach from the Global Fund. It was designed to further facilitate alignment of Global Fund financing with country priorities within the framework of a country's national strategy – such as the national HIV/AIDS, tuberculosis or malaria strategy. In 2008, the Global Fund Board decided to implement the NSA approach through a phased roll-out, beginning in 2009 with a 'First Learning Wave' of limited scope.

The Federal Democratic Republic of Nepal has one of the strongest national tuberculosis programs in South Asia, a distinction which was recognized by the Global Fund when Nepal's National Strategy Application (NSA) grant was the only grant approved in the South East Asia and Western Pacific region in 2009. To build on its strengths, the National TB Program requested assistance from the Grants Management Solutions (GMS) Project to assist in consolidating its existing Round 7 grant with the new NSA grant.

Consequently, Japan-Nepal Health and Tuberculosis Research Association (JANTRA) has been working as a SR under Global Fund NSA grant. Primarily, JANTRA has responsibility for implementation of PPM/ISTC, strengthen DOTS, established referral linkage and enhance capacity of infection control to reduce the prevalence and incidence rate of Tuberculosis.

Track Record of JANTRA

JANTRA is leading and pioneer a non-profitable, public service oriented and non-governmental organization especially for the Urban Tuberculosis Program. This organization was established with support of Research Institute of Tuberculosis/ Japan Anti-Tuberculosis Association (RIT/JATA). The key objective of JANTRA is to strengthen community support and involvement to promote NTP Tuberculosis control initiatives in urban settings and marginalized populations in close conjunction with the National Tuberculosis Programme.

JANTRA is involved in urban Tuberculosis control activities through designing effective models and mobilizing urban TB volunteers. JANTRA works in close co-ordination and collaboration with local partners and National Tuberculosis Programme (NTP). JANTRA is a permanent member of the Nepal Stop TB Partnership (Tuberculosis Control Network, TBCN) and Sub-Recipient of GFATM-NSA (Global Fund to Fight AIDS, TB and Malaria - National Strategy Application) grant. JANRA has been implementing multiple and multifaceted project to urban areas to rural areas of Nepal.

Programme/Service Delivery Areas

The JANTRA's service delivery network covers 8 districts and works with TB Volunteers, TB Tracer and Female Community Health Volunteers. It has clinical and non-clinical service delivery points, dozens of full time professional staff and volunteers grassroots volunteers. In addition, JANTRA's has PPM/ISTC, urban health, volunteer mobilization, research and knowledge management specialization and functions. Similarly, JANTRA has been working in Kathmandu, Lalitpur, Bhaktapur, Chitwan, Sunsari, Parsa, Tanahu, Dhading districts.

Primarily, JANRA's has functional and operational coordination and collaboration with DPHO, Kathmandu Metropolitan City, Urban Health Clinic, DDC, Municipality and I/NGOs.

Summary of key progress & achievements during Shrawan 2068 - Ashad 2069

JANTRA had accomplished PPM / ISTC, infection control stakeholders mapping, networking, partnership, capacity building of health professional and medical / nursing students and volunteer mobilization during the 2068-2069 Fiscal year in urban areas. Activities undertook by JANTRA in 2068-2069 is listed below;

Activity	Target	Achievement
Health Education sessions on Infection Control	61	61
Sensitization meeting at regional level on PPM	1	1
Sensitization meeting at district level on PPM	1	1
Form PPM working group at district level and conduct regular meeting	3	3
Mapping of diverse health service providers	5	4
Development of urban TB center map of Kathmandu Valley	50	50
Organize workshop to develop district specific PPM/ISTC action plan	1	1
Establish linkage (referral, feedback , etc) between existing DOTS centers and private health care providers	14	14
PPM DOTS volunteer mobilization/ meetings four monthly	54	54
PPM/ISTC orientation in medical colleges	13	13
PPM/ISTC orientation at Institute of Health Sciences providing education to Paramedical, Nurse, Community Health Worker	14	14
One day orientation on PPM/ISTC to professional organizations)	6	6
Provide training to medical practitioners (PMPs) including private and public sector on PPM and ISTC (2 days)	1	1
Provide training to general health workers (paramedical, nurse) at implementation including public and private level on PPM/ISTC	1	1
Private Practitioners workshop	1	1
One day orientation to pharmacists and non-qualified medical practitioners working in private sector	3	3
One day orientation at private hospitals and nursing homes on PPM/ISTC	28	28
Observation visit (within country	1	1
Orientation to informal, non-qualified medical practitioners	4	4
PPM DOTS advocacy campaign in slum areas, and for other vulnerable groups to create service demand	7	7
Supervision and monitoring	6	6
TB Orientation for Newly formed and previous Urban TB Control group and/ or DOTS committee	3	3
TB refresher training for urban TB volunteers	3	3
Learning and sharing meeting for urban TB volunteers	2	2
Private Health Care Providers reporting four monthly meeting	25	25
Joint supervision	3	3
Capacity Building workshop - PR & SRs	1	1

Conclusion

JANTRA is leading and pioneer organization on urban health and volunteer mobilization especially in urban areas. Primarily, JANTRA had implemented PPM/ISTC; strengthen referral linkage, volunteer mobilization and infection control related intervention in urban areas. Empirically, PPM/ISCT activities had substantial impact to enhance quality and access of Tuberculosis service. Involvement of private sectors in NTP helps to enhances access of diagnosis and treatment of TB, increase number of case findings, reduce infection rate and strengthen capacity of private hospital and private health institution. However, strengthen data flow mechanism; quality control and sustainability of program are the challenging issues of PPM.

Nepal Anti Tuberculosis Association (NATA)

Background

Nepal Anti Tuberculosis Association (NATA) is a nongovernmental and non profit making social voluntary organisation established in 1953 A.D. with a view to help people affected by tuberculosis particularly through awareness raising. It is affiliated with International Union against Tuberculosis and Lung Disease (IUATLD). It stands as one of the major partner of NTP Nepal and supporting in various preventive, promotive and curative services. With the longstanding history in TB control activities, NATA has established 33 district branches till date and contributing throughout reaching up to the grass root level through Advocacy Communication and Social Mobilization (ACSM) approach involving policy makers, civil societies, media, CBOs, schools, communities affected by TB and all possible partners. Importantly it's contribution in DR TB management is crucial NATA, German Nepal Tuberculosis Project (GENETUP), initiated in 1986 in collaboration with Kuratorium Tuberkulose in der welt e.V., Germany, is functioning as National Reference Laboratory for culture and Drug Sensitivity Test (DST). It also runs the only one chst hospital (25 beded) in the country with support from Ministry of Health and Population (MoHP)., Nepal. Similarly, it is offering DOTS and DR management services in 7 and 2 districts respectively. Besides it is Running DR hostels providing free accommodation and food for the needy DR patients during their treatment. Apart from these, it has prominent role in TB research and surveillance particularly DR surveillance and providing technical assistance to NTP Nepal.

Programmes and service delivery areas of NATA

The major activities of NATA are TB related preventive and curative activities. NATA has been making efforts in carrying out activities to reach community people at the grass-root level as well as the vulnerable groups directly and indirectly through different means. Similarly, DOTS and DR-TB clinics are being operated through several District Branches with the provision of curative services like examination, laboratory, x-ray services and DOT services. NATA has been engaged in TB related "Advocacy, Communication and Social Mobilization (ACSM)" programmes has been organizing as a part of NTP with the support of the Global Fund to fight against AIDS, Tuberculosis and Malaria (GFATM).

Summary of key progress & achievements during Shrawan 2068 - Ashad 2069

Kalimati chest hospital:

In total 283 patients were treated during the fiscal year 2068/69. Among them 194 were DOTS patient, 25 were DR patient, 12 were XDR patient and 52 were non TB patient. More than 95% patient n this hospital are pleural effusion so fluid tapping been done for them. Adenosine DE Aminase (ADA) service has been started and AFB (Acid Fast Bacilli), (C/S) Culture service is running in this hospital.

Laboratory Service:

According to the target of 12391 laboratory investigation in this hospital 21460 investigation was done from 3536 patients which was 173.19% of target. Among them 745 investigation were done free of cost on the occasion of National TB Day.

X-Ray Service:

Target number of X-Ray was 900 but 1424 X-Ray was done throughout the year which was 158.22% of target. Among them 158 were new suspected TB patient, 428 were old TB patient and 811 were non TB patient.

GENETUP Programme:

From OPD Service of this programme 3726 suspected TB patients were examined and 1797 old cases of TB were examined from OPD service among new OPD patient 602 were diagnosed TB. GENETUP is running DOTS clinic as well from DOTS clinic it has provided services to 76 new smear positive care, 38 new smear negative case, 88 new extra pulmonary case and 28 relapse patients.

From the national TB Reference Laboratory of GENETUP, 12423 specimen smear was examined of 4405 people, 2724 follow up specimen smear was examined of 2255 and 3515 specimen culture was examined of 1724 people.

NSA Programme

NATA has organised many programmes in different service delivery areas as provided from the NSA programme PR (Principle Recipient) National Tuberculosis Centre such as Laboratory Network, Health System Strengthening, TB-HIV Collaboration, DR TB management, ACSM (Advocacy Communication and Social Mobilization) and Programme Management and Administration. For DR TB management NATA is running DR hostels in Central office Kalimati Kathmandu and Morang and providing free laboratory service, DST, Culture facilities and economic support to DR patients. NATA had organised ACSM programmes in 20 districts of Nepal and during the end of the Fiscal Year Total Achievement on the basis of Weight age was 85%.

Laboratory Network:

Activity	Measurement Unit	Target	Achievement
Quality assurance under supranational laboratory for DST	No. of samples	13	31
Medical Technologist for Regional QCC one in each region and one for SR	No. of Months	12	12

TB HIV Collaboration:

Activity	Measurement Unit	Target	Achievement
International TB or HIV conference	No. of Participants	2	2
Carry out HIV testing of all DR TB	No. of Patients	42	25

DR TB Management:

Activity	Measurement Unit	Target	Achievement
Relevant investigations for DR TB	No. of Patients	75	100
Provide DST to DR TB close contacts	No. of DR contacts	675	38
Encourage DR patients to form Patient Support Groups	No. of Patients Support Group	1	1
Refer DR patients to organizations providing income generation activities	No. of DR	29	10
Income generation activities for DR TB pts	DR TB patients	38	22
Provision of vocational education for DR TB pts children	No of children	24	13
XDR surveillance of new sputum positive cases registered at DR - TB centres	Times	1	1

ACSM

Awareness activities conducted in 20 district chapters	No of activities	305	305
IEC material publication (ACSM)	No of copies	3000	43000
Message broadcasted/ published	No of times	22	22
Supervision to district chapters	No of times	21	21
Formation of junior NATA	Number of groups	15	15

Service Delivery Areas/Planned Activities for July 2069 - July 2070

- To expand NATA branches for 5 more districts and expand TB and DOTS clinics through its district branches.
- To improve and upgrade Kalimati Chest Hospital.
- To promote and conduct community and school based Health education program
- To promote public awareness program campaigns through different means and medias.
- To conduct Operational Research on RIFASHORT, anti smooking TB patient and follow up DR patient
- To conduct adult women literacy & health education classes
- To expansion of DR S/C to treatment centre
- To strengthen and increase the number of DOTS centres
- Support the NTP to strengthen tuberculosis control programme through the existing facility
- To continue to support the NTP by conducting various preventive and curative activities

NayaGoreto (NG)

Background:

NayaGoreto (NG), established in June 2003 is a registered non profitable, non-government organization working in the field of TB, HIV, AIDS and Drug use. It is affiliated with Social Welfare Council (SWC) of Nepal Government and registered in the District Administration office, Kathmandu. NayaGoreto conducts different need and right based programs related to Drug use, TB, HIV and AIDS to its targeted groups involving ex-drug users, TB & HIV infected/affected people in its various projects creating a common platform for ex-drug users, TB,HIV infected/affected people of Nepal.

Vision:

NG's vision is to create new pathways for new life ways for a dignified life of marginalized, deprived and voiceless groups of the society in Nepal.

Mission:

NG's mission is to bring marginalized, deprived and vulnerable groups in mainstream for effective service delivery and mobilization of resources.

Objectives:

The major objectives of NayaGoreto are:

- to advocate on the social stigma, discrimination towards drug users, PLHA's and TB infected people for securing their rights on easy accessibility and availability of health care service;
- to disseminate information related to TB, HIV, AIDS, Drug Use, Hepatitis and other blood borne diseases;
- to educate and empower target groups through trainings, campaigning, workshops, especial day celebration, income generating activities and field visits on HIV and AIDS;
- to promote networking with other partner organization for comprehensive programs.

Expected Outputs

An enabling environment without stigma and discrimination for the TB/HIV co-infected people, drug users in Nepal is created.

Targeted Groups

The targeted groups are: Drug users, People Living with Tuberculosis (TB), HIV and AIDS, Service Providers, Activists, Media Personnel, Local Communities, Civil Society and all other stakeholders related to TB, HIV & AIDS.

Working Area:

NayaGoreto is committed to working with a vision to create an enabling environment for the Drug users, TB and HIV infected people at the community and national level. Our work mostly focuses on securing the rights of the marginalized and vulnerable people through massive advocacy and awareness programs.

Geographical Coverage:

NayaGoreto has implemented advocacy programs on Harm reduction throughout the country. During the previous project period NG conducted Infection control training to FCHV's of 19 districts and implemented other different programs on TB, HIV in the following districts: Kathmandu, Kaski,KailaliRupandehi, Chitwan, Argakhanchi, Dhanusha, Illam, Bardiya.

Major activities and achievements of NayaGoreto (2011/12)

During the fiscal year 2011/12NayaGoreto in partnership with National Tuberculosis center (NTC) implemented following activities under three headings which are:

SDA 4 Health System Strengthening

NayaGoreto conducted 199 Health Education sessions on Infection control to more than 3500 FCHV's of 19 districts of Nepal. The major objective of the program was to empower the FCHV's so that they become able to convey message on Tuberculosis infection control and other related factors to other community members.

SDA 5 TB/HIV Collaboration

NayaGoreto conducted several programs on TB, HIV, AIDS and TB/HIV co-infection in eight different districts. NayaGoreto conducted HIV counseling training in three new district including Kailali, Illam and Dhanusha. NayaGoreto conducted awareness raising program and trainings on TB, HIV and TB/HIV co-infection to the related stakeholders like the college and school students, religious groups and faith healers, local community members, women and mother's group members and the infected and affected groups themselves.

NayaGoreto referred 645 TB patients for HIV testing from Kathmandu, Dhanusha, Chitwan and Rupandehi. NayaGoreto also referred HIV vulnerable people for TB screening for increasing the case detection rate of HIV. These two programs created inter-linkages between VCT and DOTS services.

NayaGoreto provided income generation and socio-economic rehabilitation to 14 patients infected with TB and HIV as well as vocational training to 21 patients and their family members.

SDA 8 ACSM (Advocacy Communication and Social Mobilization)

NayaGoreto screened more than 20 dramas in six districts of Nepal for spreading the knowledge of TB, HIV and AIDS among the general population with theeffective mobilization of the infected and affected people.

NayaGoreto in support of NTC conducted Knowledge, Attitude and Practice (KAP) study on TB among the general people of five districts of Nepal including Illam, Dhanusha, Rupandehi, Bardiya and Kailali. The study was conducted to assess the knowledge of the general people on Tuberculosis.

Future Activities

The future targeted activities of NayaGoreto for the fiscal year 2069/70 are as follows:

Continuation of the TB/HIV collaboration activities and Activities under ACSM including:

TB/HIV training to PLHIV group, Treatment Literacy and Treatment Adherence training, TB/HIV orientation to different target groups (Women & mother's groups, Religious groups and faith healers, school and college students, VDC and DOTS committee, Volunteers and support groups and other targeted groups), street dramas including the infected and affected groups, Vocational training, Income generation support to the TB/HIV co-infected patients, VCT training to Government and non-government officials, Explorative KAP study etc.

National Federation of Women Living with HIV and AIDS (NFWLHA)

Background

National Federation of Women Living with HIV and AIDS is one of the Sub-recipients for the implementation of the project The project entitled **'National Tuberculosis Programme (NTP), Nepal Support Project'**, largely funded by Global Fund under National Strategic Application (NSA) The targeted districts for the implementation of the project activities are Sankhuwasabha, Jhapa, Morang, Dailekh, Dang, Banke, Arghakhanchi and Illam. As of previous year this year too, the local CBOs lead by women living with HIV and AIDS implemented all the activities under the close monitoring, mentoring and guidance of NFWLHA. There were altogether 94 activities. The total programmatic achievement based on the weightage is 92% whereas the financial achievement was 83%.

Programme/Service Delivery Areas

SDA 5 TB/HIV Collaboration
SDA 8 Advocacy, Communication and Social Mobilization (ACSM)
SDA 9 Operational Research

The objective of the TB/HIV Collaboration is to decrease the burden of TB/HIV in the population affected by both diseases by ensuring effective collaboration between TB and HIV programmmes through effective coordination and delivery of collaborative services.

Summary of key progress & achievements during Shrawan 2068 - Ashad 2069

Activity	Target	Achievements
To decrease the burden of TB/HIV in the population affected by both diseases by ensuring effective collaboration between TB and HIV programmmes through effective coordination and delivery of collaborative services		
TB/HIV training to PLHIV group through their existing network	3	3
Treatment literacy and treatment adherence training to TB/HIV co-infected	3	3
TB/HIV orientation to volunteers and support groups	2	2
Carry out intensified TB case finding among HIV vulnerable groups	1	1
Carry out intensified HIV case finding amongst all TB patients in target districts at registration	1,500	1500
TB/HIV advocacy and awareness activities for leaders, organizations and service provider groups	1	1
TB/HIV advocacy campaign for NGOs/CBOs working in HIV	1	-
District level orientation on TB/HIV to National Network Group members of Female Sex Workers, IDUs, MSM, transport workers (MARPs)	2	2
Conduct National meeting of TB/HIV (once a year) through PLHIV, NGOs and other existing network	1	1
TB/HIV co-infected patient/client to patient/client education	3	3
TB/HIV orientation to Village Development Committee members, DOTS committee,	7	7
TB/HIV orientation to religious and faith healers	10	9
TB/HIV orientation to women and mothers groups (these groups exist in community)	10	10
TB/HIV orientation to school and college students (specific target to young boys and girls)	5	5
Street drama on TB/HIV by patient infected with TB/HIV (HIV positive street drama group exist)	7	8
Establish support groups for TB/HIV co-infected client (self help group)	8	8
Empowerment - human rights, legal support, information, demand creation, involve infected and affected in decision making, fight against stigma and discrimination (promoting GIPA and MIPA principle)	2	2
Vocational training (driving, animal husbandry, farming, carpentering, tailoring, hand crafts, small business management, plumber, electricity, handyman, computer, hair cutting)	20	24
Advocacy, Communication and Social Mobilization (ACSM)		
Street drama on TB (to be performed in areas with low awareness on TB)	7	9
Operational Research		
Participate at national level conference/seminar every year	1	-

Netherland's Leprosy Relief (NLR)

Background

Netherlands Leprosy (NLR) is an INGO which was established in 1967 as a private initially supporting leprosy control activities in Tanzania and Nepal. NLR in order to raise funds and provide technical support to the leprosy control activities in Nepal started in 1985 Since the this project continue support in east. In 1991 this project was extended to Far-west Region.

The project had an opportunity to assist the Government of Nepal in TB/Leprosy control activates in this region.NLR assisted the National Tuberculosis Program implemented in all nine districts DOTS as a treatment strategy since 1996. DOTS are implemented in all nine districts of the region.

The overall goal of National Tuberculosis Program is to reduce mortality, morbidity and transmission of disease to such level that is no longer a public health problem. Netherlands Leprosy Relief (NLR) is assisting to the national tuberculosis program in the far west region since 1995/96 to achieve objective formulated by NTP.NLR is acting as a supporting partner of the regional health service directorate for the implementation of tuberculosis program in the region.

Tuberculosis Assisting Program

Summary of the planned activities and achievement 2068/2069

Activity	Unit	Planned	Achievement	Remarks
Training				
Basic Sputum Smear Microscopy	Person	8	9	
Refresher Sputum Smear Microscopy	Person	8	8	
Orientation for Private lab.	Person	15	15	
Workshop and Meeting				
Facilitate in DTLO's workshop	Time	3	3	
Facilitate in RTLO's/QCA's workshop	Time	3	3	
Supervision				
Microscopy Center Supervision	MCs	45	41	9 districts
Laboratory Service				
Slide Cross Check	slide	3	3	4328 Slides
Supply logistic				
Reagent Supply	Time	3	3	1011 litters

Activities Performed

Training Basic Sputum Smear microscopy training 5 days for lab staff, Number of participant for Basic microscopy training were 9, Refresher Sputum Smear microscopy training 3 days for lab staff, Number of participant for Refresher were- 8, private lab. Person orientation was 15.

Supervision/monitoring

Main objective of supervision is to provide technical support to improve work performance of health worker and patient's compliance rate-41 microscopy center were visited in the region.

Supply /logistic

NLR has been assisting to prepare reagent and distributed from the Regional medical store to all nine districts of the region on the basis of quarterly case finding report-337.5litter carbol fuchsine,337 Methylen blue,337 litter sulphuric Acid, all together -1011 litter reagent prepared and supplied.

Quality control of sputum smears

54538 Slide were examined from 72 Microscopy Center, 4328 sputum smear slide were cross-

checked. The overall agreement rate was 98 % false positive 4.2 %, False negative 1.3% among the crosschecked slide.

Participation in Reporting, Planning and Review workshop

NLR is assisting to prepare quarterly (4monthly) and annual report of Quality control activities for NTP. Quality control staff participated and facilitated to provide feedback report of Quality control at regional level as well as National level reporting, planning and review workshop.

Planned activities for 2069/2070

Activity	Unit	Planned	Remarks
Training on Basic sputum smear Microscopy	Person	8	
Training on Refresher sputum Smear Microscopy	Person	16	
Training on LQAS	Person	20	
Regional lab workshop	Person	74	
Orientation for Private Lab.	Person	15	
Microscopy Center Supervision	District	9	
Slide Crosscheck	Time	3	
Reagent Supply	Time	3	

SAARC Tuberculosis and HIV/AIDS Centre (STAC)

Background

The South Asian Association for Regional Cooperation (SAARC) is a manifestation of the determination of the people of South Asia to work together towards finding solutions to their common problems in a spirit of friendship, trust and understanding. The SAARC comprises of Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The main objective of the association is to accelerate the process of economic and social development in Member States through joint action in the agreed areas of cooperation. SAARC is supported by different Regional Centres established in Member States to promote regional cooperation.

SAARC TB and HIV/AIDS Centre (STAC) is one of the Regional Centre of SAARC. The STAC is also a WHO collaborating centre for TB, TB/HIV, research and training. The Centre has developed its networks between the Member States in different aspects of TB and HIV/AIDS control. The Centre coordinates with the NTPs and NACPs of Members States for implementation of Regional Strategies. It also supports in sharing of experiences of new findings in coordinated manner. Human resource development is taken as one of the major task of the Centre, so that the Centre is supporting the Member States in the field of skill development and upgrading of the knowledge & capacity of the staff working in National TB and HIV/AIDS control programmes. STAC has been performing Quality Assurance (QA) of sputum smear microscopy activity in National TB Reference Laboratories of SAARC Member States and has already completed nine rounds of proficiency testing. The Centre communicates & disseminates the information to the Member States through different technical documents and reports for the sake of sharing of experiences. The Centre also participates in National/International review of NTPs and NACPs of Member States on the request and performs any additional activities identified by the Governing Board of STAC.

Programmes/Service Delivery Areas

The Centre has been working/coordinating for implementation of different activities related to TB & HIV/AIDS prevention and control, such as programmes for advocacy, communication and social mobilization (ACSM), perform as SAARC Supranational Reference Laboratory, dealing with Cross-border Issues in TB and HIV/AIDS, programme related to Human Resource Development, act as Regional Resource Centre, conduct Research/Study related to TB and HIV/AIDS, Monitoring and Evaluation, act as WHO Collaborating Centre and conduct its activities based on the Regional requirements, felt needs and recommendations of National TB & HIV/AIDS Control Programmes of SAARC Member States.

Summary of key progress and achievements made in 2012

1. SAARC Regional Training of Trainers for Microbiologist on Culture and DST of Mycobaterium Tuberculosis
2. SAARC Consultative Meeting of Programme Managers of HIV/AIDS to revise the SAARC Regional Strategy on HIV/AIDS (2012-2016)
3. SAARC Regional Expert Group Meeting of TB Programme Manager

Research/Study

- Study of factors associated with development of DR in TB patients on DOTS – (Bhutan)
- HIV prevalence among TB patients by visiting National TB Centre, Nepal and drug susceptibility pattern *M. Tuberculosis* isolated from TB patients with or without HIV infection (Nepal)
- The Pharmacovigilance Study on FDCs (Anti-TB drugs) (Sri Lanka)

Public Awareness and Advocacy Programmes on TB and HIV/AIDS

- Commemoration of World TB Day and World AIDS Day
- Celebration of SAARC Charter Day
- Publication of awareness and advocacy materials

STAC's presentations & dissemination of findings in International Conferences

Director, Deputy Director and Professionals Staff participated in the following activities:

- SAARC Health Ministers' Meeting
- Workshop on country capacity building on WHO collaborating centres
- XIX International AIDS Conference
- Meeting of SAARC Regional Directors
- Regional Workshop on Programmatic Management of Drug Resistant Tuberculosis, Thailand
- ASTICON 2012
- 43rd Union World Conference on Lung Health

Production of STAC Publications

- STAC Newsletters
- SAARC Journal of TB, Lung Diseases and HIV/AIDS
- SAARC Epidemiological Yearly Reports on Tuberculosis – 2012
- SAARC Epidemiological Yearly Reports on HIV/AIDS – 2012
- Annual Report – 2012
- STAC Regional Strategy on Advocacy, Communication and Social Mobilization (ACSM) for TB and HIV/AIDS
- Ninth Round Proficiency Testing of Sputum Smear Microscopy for NTRL in SAARC Region, 2012
- Wall Calendar 2013
- Report on TB & HIV/AIDS Control Management, Diagnosis & Treatment Facilities in SAARC Member States (in printing process)
- SAARC Regional Directory of Tuberculosis, HIV/AIDS, Laboratory and Experts (in printing process)

Planned Activities for 2013

Apart from the regular activities, the Centre has planned some new activities to be carried out in the year 2013.

The research/study on new aspect of TB and HIV/AIDS will be conducted in Member States as per the identified protocols. Simultaneously, the activities under the process of completion will also be completed.

Skill development and knowledge upgrading activities will be conducted in Member State under the title of Human Resource Development. It will be for TB and HIV/AIDS control management, leadership development, ART, laboratory management etc. The Quality Assurance activity of the Reference Laboratory will be continued and 10th round of proficiency testing will be carried out.

Programme monitoring and evaluation will be done by organizing meeting/workshop of the programme managers of National TB and HIV/AIDS Programmes. Meeting with collaborating institutions will also be organized as per need to update/develop networking.

The findings of the Centre will be presented or shared in the Regional/International forum by participating in conferences/meetings.

Programmes for SAARC Goodwill Ambassadors for HIV/AIDS will be formulated and implemented in due course of time.

Regarding the publications, the Centre will publish some new publications along with its regular publications such as STAC Newsletters, STAC Journals, Epidemiological Reports etc. These publications will be circulated to the Member States through internet (website) or surface mail.

STAC website will be updated to spread the required information.

Annex 1: Nepal NTP Indicators, 2010/1 to 2014/5

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
									Yr1	Yr2	Yr3	Yr4	Yr5	Total
Impact and Outcome Indicators														
0.1	Impact (not linked to a specific activity)	No	No	TB prevalence rate (used by NTC – includes new, relapsed and other)	**Numerator:** No. of TB cases registered and treated through NTP x 100,000 **Denominator:** Estimated total population at mid-year	Analysis of data from TB Registers and Census	Annual	NTC Planning, Monitoring and Statistical Section	124.3	125.7	125.5	125.3	123.5	
0.2	Impact (not linked to a specific activity)	No	No	Notification rate for new smear-positive pulmonary (P+) TB cases, by age, gender and area	**Numerator:** No. of new P+ cases registered in a defined population (age, gender, district/region/country) x 100,000 **Denominator:** Estimated population at mid-year for that defined population	Analysis of data from TB Registers, and Census	Annual	NTC Planning, Monitoring and Statistical Section	57.3	58.0	57.9	57.8	57.0	
0.2a	Impact (not linked to a specific activity)	No	No	TB Mortality rate-the number of deaths caused by TB excluding deaths occurring in HIV-positive TB cases.	**Numerator:** Number of death caused by TB **Denominator:** Mid-year population	Analysis of data from TB Registers, and Census	Annual	NTC Planning, Monitoring and Statistical Section	22/100000	22/100000	22/100000	22/100000	22/100000	
0.3	Outcome (not linked to a specific activity)	Yes	No	Case detection rate for new smear-positive (P+) pulmonary TB cases (expressed as a percentage)	**Numerator:** No. of new P+ detected x 100 **Denominator:** ARI estimate x estimated population at mid-year x 50/100,000	Analysis of data from TB Registers, census and latest ARI	Trimester	NTC Planning, Monitoring and Statistical Section.	78%	80%	81%	82%	82%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
									Yr1	Yr2	Yr3	Yr4	Yr5	Total
0.4	Outcome (not linked to a specific activity)	Yes	No	Percentage increase in new smear-positive cases registered (expressed as a percentage)	**Numerator:** (No. of new P+ detected – No. detected the previous year) x 100 **Denominator:** No. of new P+ cases detected the previous year	Analysis of data from TB register	Annual	NTC Planning, Monitoring and Statistical Section.	4.2%	3.3%	3.0%	1.9%	0.7%	
0.5	Outcome (not linked to a specific activity)	No	No	Cure rate of new P+ case (expressed as a percentage)s	**Numerator:** No. of new P+ cases who were smear negative in the last month of treatment and on at least one previous occasion x 100. **Denominator:** No. of new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS Plus centers	Trimester	NTC Planning, Monitoring and Statistical Section	85%	85%	85%	85%	85%	
0.6	Outcome (not linked to a specific activity)	No	No	Completion rate for new P+ cases (expressed as a percentage)	**Numerator:** No. of new P+ cases registered who completed treatment but did not meet the criteria for cure or failure x 100. **Denominator:** Number of all new smear-positive cases registered in the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	5%	5%	5%	5%	5%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
									Yr1	Yr2	Yr3	Yr4	Yr5	Total
0.7	Outcome (not linked to a specific activity)	Yes	No	Treatment success rate for P+ cases (expressed as a percentage)	**Numerator:** [(No. of new P+ cases who smear negative in the last month of treatment and on at least one previous occasion) + (No. of new P+ cases registered who completed treatment but did not meet the criteria for cure or failure)] x 100 **Denominator:** No. of new P+ cases registered for treatment during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	90%	90%	90%	90%	90%	
0.8	Outcome (not linked to a specific activity)	No	No	Proportion of new P+ cases to all new TB cases detected	**Numerator:** No. of new P+ cases registered **Denominator:** No. of new cases (P+ , P-, and new extra-pulmonary cases) detected during the same period	Cohort analysis of TB registers at DOTS Plus centers	Trimester	NTC Planning, Monitoring and Statistical Section	50%	50%	50%	50%	50%	
0.9	Outcome (not linked to a specific activity)	No	No	Death rate for new P+ cases (expressed as a percentage)	**Numerator**: No. of new P+ cases registered for treatment who died from any cause during treatment x 100 **Denominator**: No. of new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	< 5%	< 5%	< 5%	< 5%	< 5%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
									Yr1	Yr2	Yr3	Yr4	Yr5	Total
0.10	Outcome (not linked to a specific activity)	No	No	Failure rate (for new P+ cases) (expressed as a percentage)	**Numerator:** No. of new P+ cases who remained smear-positive at 5 months, or later, after initiating treatment x 100 **Denominator:** No. of all new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	1%	1%	1%	1%	1%	
0.11	Outcome (not linked to a specific activity)	No	No	Defaulter rate for new P+ case) (expressed as a percentage)	**Numerator:** No. of new P+ cases who interrupted treatment for more than 2 consecutive months x 100 **Denominator:** No. of all new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	2%	2%	2%	2%	2%	
0.12	Outcome (not linked to a specific activity)	No	No	Transferred out rate for new P+ cases (expressed as a percentage)	**Numerator:** No. of new P+ cases who transferred to another reporting unit and for whom the treatment outcome is not known x 100 **Denominator:** No. of all new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	2%	2%	2%	2%	2%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
									Yr1	Yr2	Yr3	Yr4	Yr5	Total
0.13	Outcome (not linked to a specific activity)	Yes	No	Treatment success rate for DR-TB cases (expressed as a percentage)	**Numerator:** (No. of DR-TB patients registered for treatment who converted from P+ to P- at 6 months after beginning treatment and remain P-) x 100 **Denominator:** No. of DR-TB cases registered for treatment during the same period	Cohort analysis of TB registers at DR-TB DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	70%	70%	72%	75%	75%	
0.14	Outcome (not linked to a specific activity)	No	No	Smear conversion rate for P+ cases (expressed as a percentage)	**Numerator:** No. of new P+ cases who converted to smear negative after 2 [3 for retreatment cases] months of treatment x 100 **Denominator:** No. of new P+ cases registered during the same period	Cohort analysis of TB registers at DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	85%	85%	85%	85%	85%	
0.15	Outcome (not linked to a specific activity)	No	No	Positivity Rate for P+ cases (expressed as a percentage)	**Numerator:** No. of P+ cases detected during a trimester **Denominator:** No. of TB suspects examined by smear microscopy during that trimester	Cohort analysis of TB Registers at DOTS Centers	Trimester	NTC Planning, Monitoring and Statistical Section	10%	10%	10%	10%	10%	

Annex 2: Nepal NTP Service Delivery Area (SDA) specific indicators, 2010/1 to 2014/5[1]

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
SDA 1: Improving Diagnosis														
1.1	1.1.2	Yes	No	No. of new sputum smear positive (P+) TB cases detected	No. of TB suspects who were diagnosed as smear-positive at a DOTS center (estimate calculated using decreasing ARI, increasing CDR and population)	TB register from DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	16,365	16,904	17,234	17,564	17,679	85,746
1.2	1.1.1	No	No	No. of estimated smear positive TB cases	No. of people who consult a DOTS center for possible TB infection but whose TB status is not yet know at the time of the visit.	Patient register from DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	20,981	21,130	21,277	21,420	21,559	106,367
1.3	1.1.3	No	No	No. of new smear-negative pulmonary TB cases	Estimated as 30% of all new cases	TB register from DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	9,819	10,142	10,340	10,538	10,607	51,446
1.4	1.1.4	No	No	No. of new extra-pulmonary TB cases	Estimated as 20% of all new cases	TB register summarized through reports from DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	6,546	6,761	6,893	7,025	7,071	34,296
1.5	1.1.5	No	No	No. of re-treatment TB cases	Estimated as 15% of expected new positive case (includes relapse, return after default and failure cases)	TB register summarized through reports from DOTS centers	Trimester	NTC Planning, Monitoring and Statistical Section	2,455	2,536	2,585	2,635	2,652	12,863
1.6	1.1.7	No	No	No. of suspect sputum smear examinations	Assuming three sputum smears to be examined per TB suspect	Laboratory register	Trimester	NTC Planning, Monitoring and Statistical Section	629,439	633,913	638,298	642,588	646,776	3,191,014
SDA 2: High quality DOTS														
2.1	2.2	No	No	DOTS coverage (%)	**Numerator**: No. GoN DOTS centers and sub-centers x 100 **Denominator**: No. of health units in public health system	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
2.2	2.2.1	GF	No	No. of public DOTS centers and sub-centers established	GoN health institution/ unit, not providing DOTS before, is given: training; equipment; and/or supplies, to provide one or more area of DOTS	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	16	16	22	23	23	100
2.3	2.3	GF	No	Percentage of treatment centers with no stock out	**Numerator:** No. of treatment centers with no stock-out (no absence of stock) of one or more anti-TB medicines, for any length of time, during the reporting period x 100 **Denominator:** No. of treatment centers	Logistic request form from districts DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	
2.4	2.4.1.5, 2.4.1.6, 2.4.1.8, 2.4.1.10	GF	Yes	Number of health care workers trained in DOTS	No. of health care workers (clinical staff) receiving initial training in diagnosis and treatment of TB using a standardized module. FCHV, late patient tracing and refresher training are not included.	Training reports, attendance lists	Trimester	NTC Planning, Monitoring and Statistical Section	4,525	4,525	4,525	4,525	4,525	22,625
SDA 3: Laboratory Network														
3.1	3, 1.1.9	No	No	Percentage agreement between sending laboratory and reference laboratory	**Numerator:** No. of smears read the same by the sending lab and the reference lab x 100 **Denominator:** No. of slides sent by the participating laboratory to the reference lab for quality assurance	QC laboratory report	Trimester	NTC Reference Laboratory	95%	95%	95%	95%	95`%	
3.2	3.1.1.2, 3.1.1.4	Yes	Yes	No. of microscopy centers set up to offer TB microscopy services	Microscopy center (public, municipality or private) is given: microscope; supplies; and/or training to examine sputum smears.	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	21	42	69	97	125	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
3.3	3.1.1	No	No	Percentage of public DOTS laboratories participating in the National Lab Network	**Numerator:** No. of public laboratories submitting smear for re-checking for quality assurance x 100 **Denominator**: No. of functioning public laboratories examining sputum smears (DOTS)	QA smear microscopy report submitted to NTC	Trimester	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	
3.4	3.1.1.11, 3.1.1.12, 3.6.1.2, 3.6.2.2, 3.6.2.4	No	No	No. of laboratory staff trained in TB microscopy	No. of laboratory staff (public & private) trained in sputum smear microscopy using a standardized module. Does not include refresher training.	QC laboratory reports	Trimester	NTC Planning, Monitoring and Statistical Section	310	275	210	150	100	1,030
3.5	3.2.2.7, 3.2.3.3, 3.2.3.4	No	No	No. of laboratory staff trained in culture and/or DST	No. of laboratory staff trained in culture and/or DST using a standardized module	Training reports, attendance lists.	Trimester	NTC Planning, Monitoring and Statistical Section	16	8	8	8	6	46
SDA 4: Health Systems Strengthening (HSS)														
SDA 4.1: **Practical Approach to Lung Health (PAL)**														
4.1.1	4.1	Yes	Yes	No. of districts implementing PAL	No. of districts that have at least one health unit that is implementing PAL	Training reports, attendance lists.	Trimester	NTC Planning, Monitoring and Statistical Section	9	14	19	24	29	29
4.1.2	4.1.1	Yes	Yes	No. of public health facilities (down to health post level) implementing PAL	No. of public health facilities (down to health post level) with staff trained in PAL, receiving logistics and reporting PAL activities	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	496	859	1,279	1,607	1,977	1,977
4.1.3	4.1.1	Yes	No	% of health units implementing PAL within target districts	**Numerator**: No. of public health facilities implementing PAL x 100 **Denominator:** No. of health facilities in PAL implementing districts	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
4.1.4	4.1.1.8, 4.1.1.9, 4.1.1.10, 4.1.1.11	Yes	Yes	No. of health care workers trained in PAL	No. of health care workers initially trained in PAL using a standardized module.	Training reports, attendance lists.	Trimester	NTC Planning, Monitoring and Statistical Section	925	1,895	2,895	3,940	5015	5,015
4.1.5		Yes	No	% of respiratory patients found to have TB (all types) through PAL	**Numerator**: No. of TB cases detected by public health facilities implementing PAL x 100 **Denominator:** No. of respiratory cases reported by public health unit implementing PAL during reporting period	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section						
SDA 4.2: **Infection Control**														
4.2.1	4.2.3.4	Yes	No	No. of health units installing ventilation systems	No. of health units installing a ventilation system for infection control purposes	Activity report	Trimester	NTC Planning, Monitoring and Statistical Section	0	100	100	100	100	400
4.2.2	4.2.2.3	Yes	No	No. of health care workers trained in infection control	No. of health care workers trained in infection control policy using a standardized module.	Training reports, attendance lists.	Trimester	NTC Planning, Monitoring and Statistical Section	0	5,000	0	0	0	5,000
SDA 5: TB/HIV Collaboration														
5.1	5	Yes	Yes	No. of districts implementing TB/HIV collaborative activities	Collaborative activities may include: establishing DOTS in a VCT/ART site/ VCT in a DOTS centres; establishing referral system between HIV/AIDS site (VCT, treatment) and DOTS centres; awareness raising, etc.	Activity report	Trimester	NTC Planning, Monitoring and Statistical Section	15	20	25	30	35	35
5.2	5.5.2, 5.5.4	Yes	Yes	No. of health facilities established to offer VCT and DOTS	No. of ART/VCT sites with new DOTS services + No. of DOTS centers with new VCT services)	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	25	35	45	55	65	65

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
5.3	5.3.3, 5.3.5, 5.3.8, 5.3.10	Yes	Yes	No. of health care workers trained in TB/HIV	No. of health care workers who received initial training in TB/HIV using a standardized training module. Doesn't include TOT or refresher training.	Training reports, attendance lists	Trimester	NTC Planning, Monitoring and Statistical Section	330	630	720	810	930	930
SDA 6: DR TB Management														
6.1	6	Yes	Yes	No. of DR-TB centers / sub-centers established	DR-TB center has a DR-TB register and provides: diagnosis of DR, daily treatment observation; scheduled review of treatment progress with collection of sputum samples for culture; manages side effects, etc. DR-TB sub-center provides: daily treatment observation; management of minor side effects	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	56	62	68	74	80	80
6.2	6.1.2.3	Yes	No	No. of patients registered for DR-TB treatment	No. of DR-TB cases enrolled in second line anti-TB treatment	TB Register at DR-TB treatment centers	Trimester	NTC Planning, Monitoring and Statistical Section	300	300	300	300	300	1,500
6.3	6.1.1.6-7	Yes	Yes	No. of health professionals trained in the management of DR-TB	No of health professionals initially trained in management of DR-TB using a standardized training module. Does not include refresher training.	Training reports, attendance lists	Trimester	NTC Planning, Monitoring and Statistical Section	105	180	225	270	330	330
6.4	5.5.7	No	Yes	No. of DR-TB cases tested for HIV/AIDS	No. of DR-TB cases who were tested for HIV/AIDS	Reports from DR center	Trimester	NTC Planning, Monitoring and Statistical Section	150	150	150	150	150	750
SDA 7: Public Private Mix (PPM)														
7.1	7	Yes	Yes	No. of districts with intensified PPM activities	No. of districts implementing intensified PPM activities, e.g., training private providers in DOTS, establishing PPM committee, etc.	Review of activity reports	Annual	NTC Planning, Monitoring and Statistical Section	15	20	25	30	35	35

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
7.2	7.2.3	Yes	Yes	No. of private or municipality health facilities centres (e.g. factories, slum areas, prisons, health institutions including private and public) established as DOTS centre or sub-centre	New TB service delivery centers or sub-centres (e.g. factories, slum areas, prisons, health institutions including private and public) given: training; equipment; and/or supplies, to provide one or more area of DOTS and to follow NTP & PPM/ ISTC policies and guidelines.	DHO/DPHO report	Trimester	NTC Planning, Monitoring and Statistical Section	20	40	60	80	100	100
7.3	7.3.6-10	Yes	Yes	No. of private or municipality health care workers initially trained or oriented in DOTS	Health care workers trained in DOTS using a standardized training module (includes paramedicals, pharmacists, non-qualified medical practitioners, etc.)	Training reports, attendance lists	Trimester	NTC Planning, Monitoring and Statistical Section	935	1,885	2,960	4,160	5,485	5,485
SDA 8: Advocacy, Communication and Social Mobilization (ACSM)														
8.1	8	Yes	Yes	No. of districts implementing intensified ACSM activities	Intensified ACSM activities include: advocacy campaigns; training of FCHVs, school teachers; media activities, etc. in target districts (chosen based on CDR)	DHO/DPHO reports, SR reports	Trimester	NTC Planning, Monitoring and Statistical Section	47	56	62	64	75	75
8.2	4.2.1.8, 5.3.12, 8.2.3	Yes	Yes	No. of FCHVs trained or oriented in TB ACSM	No. of FCHVs receiving orientation/training in TB advocacy, health education, communication, etc., in target districts	Training reports, attendance lists (DHO/ DPHO, SR)	Trimester	NTC Planning, Monitoring and Statistical Section	22,496	44,028	47,628	49,518	55,683	55,683
8.3	7.3.17, 8.3.3-4, 8.5.1.2-3, 8.3.14	Yes	Yes, per year	No. of persons in high-risk/ vulnerable groups receiving TB health education	No. of prisoners, slum dwellers and factory workers receiving TB health education during TB awareness programs	DHO/DPHO reports SR reports	Trimester	NTC Planning, Monitoring and Statistical Section	14,190	12,900	13,000	13,100	13,200	66,390
SDA9: Operational Research														
9.1	5.4.1-2, 5.4.4-5, 6.8.1-2, 8.6.5, 9.2.3, 9.2.5-12	Yes	Yes, over prog. term	No. of research studies completed and final report disseminated	No of research studies completed and final report (method, results and implications) disseminated to NTP (includes NTC and partners)	Final report	Trimester	NTC Planning, Monitoring and Statistical Section	9	19	27	37	44	44

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
SDA 10: Monitoring and Evaluation														
10.1	2.6.1-2, 3.4.4, 3.6.1.8, 3.6.2.6, 10.1.2.2-3, 11.7.19	No	No	No. of supervisory visits to treatment centers/ sub-centers	No. of supervisory visits, central to region, region to district, district to treatment centre, treatment centre to sub centers (includes supervision by QC laboratories)	DHO/DPHO reports, NTC reports SR reports	Annual	NTC Planning, Monitoring and Statistical Section	6,053	6,068	6,068	6,068	6,068	30,325
10.2		No	No	Percentage of supervisory visits to treatment centers/sub-centers completed	**Numerator:** No. of supervisory visits to treatment centres/sub centers x 100 **Denominator:** No. of supervisory visits planned during the same reporting period	Supervision reports and supervision plan DHO/DPHO reports SR reports	Annual	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	
10.3	6.3.10, 6.8.4-5	No	No	No. of supervisory visits to DR-TB treatment centers/sub-centers	No. of supervisory visits to DR-TB treatment centres/ sub centers and supervision check list completed	Supervision reports and supervision plan DHO/DPHO reports SR reports	Annual	NTC Planning, Monitoring and Statistical Section	189	223	261	291	321	1285
10.4	10.2.2-3, 10.4.3-6, 10.4.8	No	Yes	No. of staff trained in M&E related issues	No. of staff trained in: data entry, database management, data analysis, etc.	Training reports, attendance lists	Trimester	NTC Planning, Monitoring and Statistical Section	2,184	2,493	3,332	3,546	4,385	4,385
10.5	10.3.1	No	Yes	Percentage of DOTS centers submitting timely reports	**Numerator:** No. of DOTS Centers which submitted NTP standard reports by the time of the National Planning/M&E Meeting x 100 **Denominator**: No. of DOTS centers in Nepal during the same reporting period	DHO/DPHO report	Annual	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	

Indicator #	Activity No. (Work plan activity code)	GFATM specific?	Cumulative?	Indicator Description	Indicator Definition	Data Collection Method	Frequency of Data Collection	Responsible section/entity	Targets					
SDA 11: Program Management														
11.1	10.1.2.5	No	No	Percentage of Sub-Recipient reviewed per year	**Numerator:** No. of Sub-Recipients visited and reviewed each trimester by at least one NTP staff using standardized data collection tool x 100 **Denominator**: No. of SR should be reviewed	Review reports	Annual	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	
11.2	11.1.14, 11.1.22, 11.1.23	No	No	No. of GFATM related reports submitted on time	No. of PUDRs, EFRs and annual reports submitted on time	Reports	Annual	NTC Planning, Monitoring and Statistical Section	5	5	5	5	5	25
11.3		No	No	Percentage of SR activities where actual performance was greater or equal to 90% of targets per SR	**Numerator**: No. of SR activities where actual performance was greater or equal to 90% of targets per SR x 100 **Denominator**: No. of SR activities planned for the same reporting period	SR performance report	Annual	NTC Planning, Monitoring and Statistical Section	100%	100%	100%	100%	100%	

Case Finding Report 2068/69 July 2011-July 2012

Annual Case Finding Report 2068/69 (July 2011July 2012)																			
District	Estimated Population	Smear Positive								Smear Negative		Extra Pulmonary		Others		Total		Proportion	
		New		Relapse		Failure		RAD										S+ve/all New	Re Tx / S+ve
	M + F	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	%	%
Bhojpur	238,354	14	29	0	5	0	2	0	0	1	5	24	18	0	3	39	62	47	14
Dhankuta	198,906	13	46	1	3	0	0	0	0	1	11	15	28	0	1	30	89	52	6
Ilam	346,206	18	54	1	6	1	0	0	0	5	10	25	24	1	1	51	95	53	10
Jhapa	864,917	213	444	32	78	2	7	1	6	124	236	116	140	7	11	495	922	52	16
Khotang	274,678	20	24	1	3	0	1	0	0	6	20	8	13	1	0	36	61	48	10
Morang	1,036,678	197	380	14	54	2	4	2	6	66	144	150	182	8	20	439	790	52	12
Okhaldhunga	188,043	19	25	3	4	0	1	0	2	5	11	9	8	0	2	36	53	57	19
Panchthar	243,835	19	51	1	4	1	0	0	0	6	13	6	8	0	0	33	76	68	8
Sankhuwasabha	191,029	10	33	4	1	0	0	0	0	1	15	17	15	0	1	32	65	47	10
Saptari	698,288	75	167	4	10	0	1	0	1	115	200	35	29	5	7	234	415	39	6
Siraha	704,607	94	253	13	25	1	2	2	2	62	122	35	47	0	0	207	451	57	11
Solukhumbu	128,497	13	14	0	4	0	0	0	0	3	3	15	10	0	0	31	31	47	13
Sunsari	780,265	125	367	5	43	3	4	2	11	61	104	146	188	14	32	356	749	50	12
Taplejung	161,528	7	19	1	1	0	2	0	0	5	14	7	4	0	0	20	40	46	13
Terhathum	135,265	2	13	0	0	0	0	0	0	0	10	13	15	0	1	15	39	28	0
Udayapur	356,030	59	101	3	18	0	0	0	1	23	54	22	35	0	0	107	209	54	12
Eastern Total	6547126	898	,020	83	259	10	24	7	29	484	972	643	764	36	79	2,161	4,147	50	12
Bara	697,812	156	329	21	35	1	10	2	0	141	236	61	79	0	6	382	695	48	12
Bhaktapur	278,778	69	130	12	27	0	0	0	1	39	61	100	90	11	7	231	316	41	17
Chitawan	584,725	130	303	21	74	2	3	1	7	119	183	100	139	12	26	385	735	44	20
Dhading	412,649	27	112	5	19	0	0	0	0	14	36	30	47	2	3	78	217	52	15
Dhanusha	823,150	117	270	13	44	1	2	1	4	143	251	58	77	10	14	343	662	42	14
Dolkha	248,155	8	25	3	6	0	0	1	2	8	17	25	28	0	1	45	79	30	27
Kathmandu	1,383,881	407	666	58	139	4	10	4	13	233	276	620	692	67	88	1393	1884	37	18
Kavre	466,594	57	118	3	25	1	3	1	3	15	45	59	57	2	7	138	258	50	17
Lalitpur	418,895	104	157	13	34	4	2	0	1	53	80	135	146	15	23	324	443	39	17
Mahottari	681,140	140	250	6	23	1	5	2	3	388	564	23	33	4	3	564	881	28	9
Makawanpur	479,291	112	242	16	49	0	3	0	1	62	88	51	70	2	11	243	464	57	16
Nuwakot	348,809	21	79	2	17	0	0	0	0	23	44	22	31	1	4	69	175	45	16
Parsa	618,698	131	249	9	36	0	1	2	7	108	218	67	75	6	1	323	587	45	13
Ramechhap	254,760	22	39	1	9	0	0	0	0	3	19	23	27	1	3	50	97	46	14
Rasuwa	53,770	9	19	0	0	0	0	0	0	1	1	5	3	0	0	15	23	74	0
Rautahat	678,117	81	176	6	18	1	0	0	1	150	260	50	70	4	10	292	535	33	9
Sarlahi	787,710	218	396	27	63	3	6	0	9	146	292	58	75	25	34	477	875	52	15
Sindhuli	344,304	54	138	5	13	0	0	0	1	16	47	25	35	1	5	101	239	61	9
Sindhupalchok	376,088	28	78	4	15	0	0	0	3	24	44	23	60	6	9	85	209	41	17
Central Total	9937326	1,891	3,776	225	646	18	45	14	56	1,686	2,762	1,535	1,834	169	255	5,538	9,374	42	15

Annual Case Finding Report 2068/69 (July 2011July 2012)																			
District	Estimated Population	Smear Positive								Smear Negative		Extra Pulmonary		Others		Total		Proportion	
		New		Relapse		Failure		RAD										S+ve/all New	Re Tx / S+ve
	M + F	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	%	%
Arghakhanchi	251,602	22	63	3	18	0	0	0	0	15	49	37	44	2	5	79	179	37	20
Baglung	324,308	29	63	5	7	0	0	0	1	12	19	19	35	0	0	65	125	52	12
Gorkha	345,911	40	96	3	16	1	3	1	1	13	36	23	34	2	1	83	187	56	16
Gulmi	354,897	25	84	8	22	0	2	0	0	22	58	47	86	1	6	103	258	34	23
Kapilbastu	597,199	128	280	7	30	1	6	1	1	40	65	48	58	2	2	227	442	66	10
Kaski	469,359	68	130	9	21	2	4	0	1	16	33	64	93	8	22	167	304	66	10
Lamjung	213,589	13	59	4	10	0	1	0	0	9	25	16	19	1	1	43	115	49	16
Manang	12,663	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	51	17
Mustang	17,263	1	1	0	0	0	0	0	0	0	1	0	2	0	0	1	4	40	0
Mygadi	137,539	14	20	1	4	0	1	0	1	1	9	10	11	2	2	28	48	52	17
Nawalparasi	695,990	124	310	15	53	1	8	0	3	76	143	80	122	4	7	300	646	51	16
Palpa	322,739	43	107	4	25	2	4	1	1	16	48	47	74	5	11	118	270	45	20
Parbat	188,717	11	37	2	6	0	0	0	2	5	14	10	8	2	5	30	72	56	17
Rupandehi	883,845	220	467	29	70	4	6	1	8	97	207	121	113	17	9	489	880	56	15
Syangja	377,450	35	97	9	23	0	0	1	1	29	36	33	49	0	0	107	206	47	20
Tanahun	381,596	54	109	10	24	3	3	0	5	21	23	34	37	4	8	126	209	59	22
Western Total	5574667	827	1,926	109	329	14	38	5	25	372	766	589	785	50	79	1,966	3,948	52	16
Banke	482,352	140	322	19	53	2	4	2	9	113	172	91	88	11	19	378	667	50	16
Bardiya	475,731	105	247	12	34	1	5	0	1	62	94	53	56	13	27	246	464	57	13
Dailekh	274,902	22	68	0	6	0	0	0	3	16	33	33	48	0	1	71	159	41	9
Dang	572,618	163	288	26	75	0	7	2	2	109	201	87	140	7	19	394	732	46	20
Dolpa	35,500	0	6	0	0	0	0	0	0	3	2	0	2	0	0	3	10	46	0
Humla	49,418	6	3	0	0	0	1	0	0	2	3	3	3	0	0	11	10	45	10
Jajarkot	163,779	18	30	5	5	0	1	0	1	22	22	15	12	2	0	62	71	40	20
Jumla	108,452	7	21	0	3	0	0	0	0	9	11	4	5	0	0	20	40	49	10
Kalikot	131,115	7	18	1	1	0	0	1	1	10	7	11	32	0	0	30	59	29	14
Mugu	53,783	6	8	0	1	0	0	0	0	3	3	1	5	0	0	10	17	54	7
Pyuthan	258,737	38	102	6	20	2	1	1	0	14	34	28	37	4	5	93	199	55	18
Rolpa	253,949	63	78	7	27	2	3	0	1	23	43	25	46	3	9	123	207	51	22
Rukum	230,000	46	44	8	10	0	1	0	1	28	28	26	28	3	3	111	115	45	18
Salyan	260,198	30	66	8	13	0	1	0	3	27	48	26	29	2	2	93	162	42	21
Surkhet	353,105	64	134	4	25	0	1	0	2	89	132	113	129	13	16	283	439	30	14
Mid-Westen Total	3703639	715	1,435	96	273	7	25	6	24	530	833	516	660	58	101	1,928	3,351	46	17
Achham	279,849	22	74	6	6	3	2	1	3	10	13	9	20	5	6	56	124	65	18
Baitadi	283,603	34	83	3	12	0	3	0	2	13	31	18	23	1	8	69	162	58	15
Bajhang	203,477	29	60	4	9	1	0	1	2	14	10	6	12	2	5	57	98	68	16

Annual Case Finding Report 2068/69 (July 2011July 2012)																			
District	Estimated Population	Smear Positive								Smear Negative		Extra Pulmonary		Others		Total		Proportion	
		New		Relapse		Failure		RAD										S+ve/all New	Re Tx / S+ve
	M + F	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	%	%
Bajura	131,374	24	32	0	2	1	2	0	1	12	7	18	23	1	0	56	67	48	10
Dadeldhura	153,442	14	52	1	3	1	3	0	0	8	26	25	18	3	4	52	106	46	11
Darchula	148,580	33	38	3	9	0	3	2	1	22	26	14	14	0	0	74	91	48	20
Doti	252,607	19	48	4	9	2	6	0	4	9	40	18	12	8	8	60	127	46	27
Kailali	784,757	168	401	21	63	5	12	2	16	116	191	70	116	22	38	404	837	54	17
Kanchanpur	480,367	143	295	18	87	4	5	0	5	38	137	53	70	10	17	266	616	60	21
Far-Western Total	2718056	486	1,083	60	200	17	36	6	34	242	481	231	308	52	86	1,094	2,228	55	18
Grand Total	28,480,814	4,817	10,240	573	1,707	66	168	38	168	3,314	5,814	3,514	4,351	365	600	12,687	23,048	47	15

Annual Case Finding Report 2068/69 (July 2011July 2012)														
District	By regimen				Male and Female together								Case detection per population (100 T)	
	Treatment regimen			All treated	Smear Positive				Smear Negative	Extra Pulmonary	other	Total		
					New	Relapse	Failure	RAD					New S+	All
	I	II	0-8years	Cases	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F
Bhojpur	101	9	3	113	43	5	2	0	6	42	3	101	18	42
Dhankuta	106	5	10	121	59	4	0	0	12	43	1	119	30	60
Ilam	145	9	0	154	72	7	1	0	15	49	2	146	21	42
Jhapa	1288	127	30	1445	657	110	9	7	360	256	18	1417	76	164
Khotang	93	5	2	100	44	4	1	0	26	21	1	97	16	35
Morang	1147	86	33	1266	577	68	6	8	210	332	28	1229	56	119
Okhaldhunga	77	11	3	91	44	7	1	2	16	17	2	89	23	47
Panchthar	102	5	5	112	70	5	1	0	19	14	0	109	29	45
Sankhuwasabha	95	5	7	107	43	5	0	0	16	32	1	97	23	51
Saptari	591	19	55	665	242	14	1	1	315	64	12	649	35	93
Siraha	608	44	18	670	347	38	3	4	184	82	0	658	49	93
Solukhumbu	63	5	0	68	27	4	0	0	6	25	0	62	21	48
Sunsari	1024	78	36	1138	492	48	7	13	165	334	46	1105	63	142
Taplejung	60	3	0	63	26	2	2	0	19	11	0	60	16	37
Terhathum	52	0	3	55	15	0	0	0	10	28	1	54	11	40
Udayapur	292	21	6	319	160	21	0	1	77	57	0	316	45	89
Eastern Total	5,844	432	211	6,487	2,918	342	34	36	1,456	1,407	115	6,308	45	96
Bara	986	69	26	1081	485	56	11	2	377	140	6	1077	70	154
Bhaktapur	501	57	18	576	199	39	0	1	100	190	18	547	71	196
Chitawan	1000	135	31	1166	433	95	5	8	302	239	38	1120	74	192
Dhading	269	26	10	305	139	24	0	0	50	77	5	295	34	71
Dhanusha	853	76	90	1019	387	57	3	5	394	135	24	1005	47	122
Dolkha	119	12	8	139	33	9	0	3	25	53	1	124	13	50
Kathmandu	2990	328	161	3479	1073	197	14	17	509	1312	155	3277	78	237
Kavre	359	40	13	412	175	28	4	4	60	116	9	396	38	85
Lalitpur	725	63	14	802	261	47	6	1	133	281	38	767	62	183
Mahottari	1339	39	74	1452	390	29	6	5	952	56	7	1445	57	212
Makawanpur	638	78	17	733	354	65	3	1	150	121	13	707	74	148
Nuwakot	223	23	0	246	100	19	0	0	67	53	5	244	29	70
Parsa	828	59	34	921	380	45	1	9	326	142	7	910	61	147
Ramechhap	151	16	1	168	61	10	0	0	22	50	4	147	24	58
Rasuwa	40	0	1	41	28	0	0	0	2	8	0	38	52	71
Rautahat	816	34	20	870	257	24	1	1	410	120	14	827	38	122
Sarlahi	1205	128	40	1373	614	90	9	9	438	133	59	1352	78	172
Sindhuli	317	26	4	347	192	18	0	1	63	60	6	340	56	99

Annual Case Finding Report 2068/69 (July 2011July 2012)														
District	By regimen				Male and Female together								Case detection per population (100 T)	
	Treatment regimen			All treated	Smear Positive				Smear Negative	Extra Pulmonary	other	Total		
					New	Relapse	Failure	RAD					New S+	All
	I	II	0-8years	Cases	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F
Sindhupalchok	273	33	9	315	106	19	0	3	68	83	15	294	28	78
Central Total	13,632	1,242	571	15,445	5,667	871	63	70	4,448	3,369	424	14,912	57	150
Arghakhanchi	232	24	8	264	85	21	0	0	64	81	7	258	34	103
Baglung	181	15	0	196	92	12	0	1	31	54	0	190	28	59
Gorkha	236	28	17	281	136	19	4	2	49	57	3	270	39	78
Gulmi	310	34	19	363	109	30	2	0	80	133	7	361	31	102
Kapilbastu	622	48	12	682	408	37	7	2	105	106	4	669	68	112
Kaski	435	43	7	485	198	30	6	1	49	157	30	471	42	100
Lamjung	146	16	5	167	72	14	1	0	34	35	2	158	34	74
Manang	3	0	0	3	3	0	0	0	0	0	0	3	24	24
Mustang	5	0	0	5	2	0	0	0	1	2	0	5	12	29
Mygadi	65	10	4	79	34	5	1	1	10	21	4	76	25	55
Nawalparasi	867	92	21	980	434	68	9	3	219	202	11	946	62	136
Palpa	331	41	14	386	150	29	6	2	64	121	16	388	46	120
Parbat	89	13	3	105	48	8	0	2	19	18	7	102	25	54
Rupandehi	1254	121	17	1392	687	99	10	9	304	234	26	1369	78	155
Syangja	274	37	11	322	132	32	0	2	65	82	0	313	35	83
Tanahun	284	48	10	342	163	34	6	5	44	71	12	335	43	88
Western Total	5,334	570	148	6,052	2,753	438	52	30	1,138	1,374	129	5,914	49	106
Banke	871	87	112	1070	462	72	6	11	285	179	30	1045	96	217
Bardiya	602	57	63	722	352	46	6	1	156	109	40	710	74	149
Dailekh	189	16	32	237	90	6	0	3	49	81	1	230	33	84
Dang	954	122	76	1152	451	101	7	4	310	227	26	1126	79	197
Dolpa	28	0	1	29	6	0	0	0	5	2	0	13	17	37
Humla	25	1	0	26	9	0	1	0	5	6	0	21	18	42
Jajarkot	115	12	9	136	48	10	1	1	44	27	2	133	29	81
Jumla	66	5	1	72	28	3	0	0	20	9	0	60	26	55
Kalikot	80	3	7	90	25	2	0	2	17	43	0	89	19	68
Mugu	28	2	0	30	14	1	0	0	6	6	0	27	26	50
Pyuthan	255	34	9	298	140	26	3	1	48	65	9	292	54	113
Rolpa	276	39	19	334	141	34	5	1	66	71	12	330	56	130
Rukum	205	20	15	240	90	18	1	1	56	54	6	226	39	98
Salyan	213	26	25	264	96	21	1	3	75	55	4	255	37	98
Surkhet	571	44	120	735	198	29	1	2	221	242	29	722	56	204
Mid-Westen Total	4,478	468	489	5,435	2,150	369	32	30	1,363	1,176	159	5,279	58	143

Annual Case Finding Report 2068/69 (July 2011July 2012)														
District	By regimen				Male and Female together								Case detection per population (100 T)	
	Treatment regimen			All treated	Smear Positive				Smear Negative	Extra Pulmonary	other	Total		
					New	Relapse	Failure	RAD					New S+	All
	I	II	0-8years	Cases	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F	M + F
Achham	148	22	11	181	96	12	5	4	23	29	11	180	34	64
Baitadi	208	21	5	234	117	15	3	2	44	41	9	231	41	81
Bajhang	142	18	1	161	89	13	1	3	24	18	7	155	44	76
Bajura	120	6	3	129	56	2	3	1	19	41	1	123	43	94
Dadeldhura	147	11	8	166	66	4	4	0	34	43	7	158	43	103
Darchula	153	15	3	171	71	12	3	3	48	28	0	165	48	111
Doti	158	29	3	190	67	13	8	4	49	30	16	187	27	74
Kailali	1057	127	90	1274	569	84	17	18	307	186	60	1241	73	158
Kanchanpur	755	130	23	908	438	105	9	5	175	123	27	882	91	184
Far-Western Total	2,888	379	147	3,414	1,569	260	53	40	723	539	138	3,322	58	122
Grand Total	32,176	3,091	1,566	36,833	15,057	2,280	234	206	9,128	7,865	965	35,735	53	125

Annual Age Group 2068/69 July 2011-July 2012

Annual Age Group 2068/69 (2011/12)																											
	Male									Female										Total							
	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total
Bhojpur	0	3	4	3	1	1	1	1	14	0	3	5	6	3	6	4	2	29	0	6	9	9	4	7	5	3	43
Dhankuta	0	1	5	1	3	3	0	0	13	0	2	7	5	8	7	13	4	46	0	3	12	6	11	10	13	4	59
Ilam	0	1	8	4	4	0	1	0	18	0	0	8	11	11	10	11	3	54	0	1	16	15	15	10	12	3	72
Jhapa	0	6	52	51	35	30	24	15	213	0	11	90	82	66	65	71	59	444	0	17	142	133	101	95	95	74	657
Khotang	0	0	3	6	5	3	2	1	20	0	0	1	8	8	3	3	1	24	0	0	4	14	13	6	5	2	44
Morang	0	4	49	41	25	35	30	13	197	0	3	77	71	52	62	60	55	380	0	7	126	112	77	97	90	68	577
Okhaldhunga	0	1	3	4	5	2	2	2	19	0	0	2	2	7	7	4	3	25	0	1	5	6	12	9	6	5	44
Panchthar	0	0	1	5	2	6	2	3	19	0	3	6	12	11	7	7	5	51	0	3	7	17	13	13	9	8	70
Sankhuwasabha	0	1	5	2	1	0	0	1	10	0	0	5	9	3	3	9	4	33	0	1	10	11	4	3	9	5	43
Saptari	0	0	7	19	19	7	21	2	75	0	0	32	19	22	24	45	25	167	0	0	39	38	41	31	66	27	242
Siraha	0	1	14	16	17	12	20	14	94	0	4	18	29	46	40	64	52	253	0	5	32	45	63	52	84	66	347
Solukhumbu	0	1	2	4	2	3	0	1	13	0	0	2	5	3	2	0	2	14	0	1	4	9	5	5	0	3	27
Sunsari	0	6	30	27	18	18	20	6	125	0	2	81	61	55	64	65	39	367	0	8	111	88	73	82	85	45	492
Taplejung	0	0	3	2	0	1	1	0	7	0	0	3	7	4	2	3	0	19	0	0	6	9	4	3	4	0	26
Terhathum	0	0	0	0	1	0	0	1	2	0	0	2	3	1	2	0	5	13	0	0	2	3	2	2	0	6	15
Udayapur	0	3	13	12	14	9	6	2	59	0	5	14	19	20	22	14	7	101	0	8	27	31	34	31	20	9	160
Eastern Total	0	28	199	197	152	130	130	62	898	0	33	353	349	320	326	373	266	2020	0	61	552	546	472	456	503	328	2918
Bara	0	2	19	28	29	24	34	20	156	0	1	35	39	56	59	84	55	329	0	3	54	67	85	83	118	75	485
Bhaktapur	0	4	31	20	2	4	3	5	69	0	2	31	27	17	21	18	14	130	0	6	62	47	19	25	21	19	199
Chitawan	1	3	34	22	15	17	23	15	130	0	3	67	40	44	56	53	40	303	1	6	101	62	59	73	76	55	433
Dhading	0	0	5	6	6	7	2	1	27	1	2	16	18	25	14	27	9	112	1	2	21	24	31	21	29	10	139
Dhanusha	0	3	14	29	21	24	17	9	117	0	1	31	32	39	55	84	28	270	0	4	45	61	60	79	101	37	387
Dolkha	0	0	1	2	0	3	2	0	8	0	1	8	4	4	5	2	1	25	0	1	9	6	4	8	4	1	33
Kathmandu	0	37	182	93	37	27	16	15	407	1	29	230	144	99	76	48	39	666	1	66	412	237	136	103	64	54	1073
Kavre	1	1	17	10	7	8	5	8	57	0	3	22	15	18	28	18	14	118	1	4	39	25	25	36	23	22	175
Lalitpur	0	7	41	19	14	7	3	13	104	1	8	38	32	21	28	22	7	157	1	15	79	51	35	35	25	20	261
Mahottari	3	15	28	24	25	27	14	4	140	3	20	36	37	46	43	45	20	250	6	35	64	61	71	70	59	24	390
Makawanpur	0	4	31	21	21	19	10	6	112	0	12	54	44	32	33	39	28	242	0	16	85	65	53	52	49	34	354
Nuwakot	0	1	8	7	1	3	1	0	21	0	6	8	14	17	16	13	5	79	0	7	16	21	18	19	14	5	100
Parsa	0	3	26	31	20	14	24	13	131	0	4	37	27	47	37	65	32	249	0	7	63	58	67	51	89	45	380
Ramechhap	0	0	3	10	1	6	2	0	22	0	0	3	13	8	6	4	5	39	0	0	6	23	9	12	6	5	61
Rasuwa	0	0	1	4	2	2	0	0	9	0	0	2	10	5	1	1	0	19	0	0	3	14	7	3	1	0	28
Rautahat	1	1	21	16	9	11	13	9	81	0	5	17	34	36	24	34	26	176	1	6	38	50	45	35	47	35	257

Annual Age Group 2068/69 (2011/12)																											
	Male									Female										Total								
	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total
Sarlahi	0	3	39	52	37	32	38	17	218	0	5	59	58	86	75	62	51	396	0	8	98	110	123	107	100	68	614
Sindhuli	0	2	14	12	6	9	8	3	54	0	4	14	21	26	24	35	14	138	0	6	28	33	32	33	43	17	192
Sindhupalchok	0	3	11	5	2	2	2	3	28	0	1	17	17	16	11	11	5	78	0	4	28	22	18	13	13	8	106
Central Total	6	89	526	411	255	246	217	141	1891	6	107	725	626	642	612	665	393	3776	12	196	1251	1037	897	858	882	534	5667
Arghakhanchi	0	0	7	3	0	3	4	5	22	0	1	9	6	8	13	12	14	63	0	1	16	9	8	16	16	19	85
Baglung	0	1	7	5	3	4	2	7	29	0	0	6	7	7	7	19	17	63	0	1	13	12	10	11	21	24	92
Gorkha	0	3	13	6	6	5	5	2	40	1	3	12	11	21	16	20	12	96	1	6	25	17	27	21	25	14	136
Gulmi	0	1	3	5	5	2	5	4	25	0	2	5	8	7	32	15	15	84	0	3	8	13	12	34	20	19	109
Kapilbastu	2	3	26	33	16	19	19	10	128	0	6	45	54	57	43	50	25	280	2	9	71	87	73	62	69	35	408
Kaski	0	6	22	20	8	7	4	1	68	0	10	36	36	15	10	11	12	130	0	16	58	56	23	17	15	13	198
Lamjung	0	0	3	5	1	3	0	1	13	0	2	9	7	7	13	11	10	59	0	2	12	12	8	16	11	11	72
Manang	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3	0	0	0	1	0	1	1	0	3
Mustang	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	0	2	0	0	0	0	0	2
Mygadi	0	0	8	2	0	2	2	0	14	0	0	4	5	5	3	0	3	20	0	0	12	7	5	5	2	3	34
Nawalparasi	2	4	24	27	17	17	19	14	124	0	1	58	49	44	56	57	45	310	2	5	82	76	61	73	76	59	434
Palpa	0	0	11	5	8	5	6	8	43	0	0	18	15	14	18	21	21	107	0	0	29	20	22	23	27	29	150
Parbat	0	0	3	4	2	1	0	1	11	0	0	8	8	4	5	4	8	37	0	0	11	12	6	6	4	9	48
Rupandehi	0	5	57	44	27	34	29	24	220	0	13	89	88	70	74	57	76	467	0	18	146	132	97	108	86	100	687
Syangja	0	2	8	5	5	5	4	6	35	0	1	13	12	7	19	16	29	97	0	3	21	17	12	24	20	35	132
Tanahun	0	2	19	12	5	5	8	3	54	0	0	15	15	18	23	22	16	109	0	2	34	27	23	28	30	19	163
Western Total	4	27	212	176	103	112	107	86	827	1	39	328	322	284	333	316	303	1926	5	66	540	498	387	445	423	389	2753
Banke	1	8	33	27	17	18	19	17	140	0	15	70	55	57	56	36	33	322	1	23	103	82	74	74	55	50	462
Bardiya	0	4	31	18	10	14	20	8	105	0	4	47	40	40	41	49	26	247	0	8	78	58	50	55	69	34	352
Dailekh	0	1	2	8	6	2	3	0	22	0	1	14	15	11	11	11	5	68	0	2	16	23	17	13	14	5	90
Dang	0	2	37	27	20	13	43	21	163	0	2	51	46	41	45	71	32	288	0	4	88	73	61	58	114	53	451
Dolpa	0	0	0	0	0	0	0	0	0	1	0	2	2	0	0	1	0	6	1	0	2	2	0	0	1	0	6
Humla	0	0	4	2	0	0	0	0	6	0	0	0	2	1	0	0	0	3	0	0	4	4	1	0	0	0	9
Jajarkot	1	1	5	6	2	3	0	0	18	0	2	8	7	1	5	5	2	30	1	3	13	13	3	8	5	2	48
Jumla	0	0	2	1	2	1	1	0	7	0	1	7	4	5	2	2	0	21	0	1	9	5	7	3	3	0	28
Kalikot	0	0	1	1	4	1	0	0	7	0	1	4	5	2	2	3	1	18	0	1	5	6	6	3	3	1	25
Mugu	0	0	2	0	4	0	0	0	6	0	1	1	4	1	0	1	0	8	0	1	3	4	5	0	1	0	14
Pyuthan	0	2	4	3	6	10	8	5	38	0	0	11	12	13	18	27	21	102	0	2	15	15	19	28	35	26	140

Annual Age Group 2068/69 (2011/12)																											
	Male									Female										Total							
	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total	0--4	5--14	15-24	25-34	35-44	45-54	55-64	65+	Total
Rolpa	0	3	12	11	7	9	15	6	63	0	0	11	10	12	21	15	9	78	0	3	23	21	19	30	30	15	141
Rukum	0	1	11	12	4	4	7	7	46	0	2	7	8	5	8	10	4	44	0	3	18	20	9	12	17	11	90
Salyan	0	0	1	5	3	8	8	5	30	0	3	8	16	8	10	15	6	66	0	3	9	21	11	18	23	11	96
Surkhet	1	5	16	16	6	11	5	4	64	0	5	28	21	24	19	25	12	134	1	10	44	37	30	30	30	16	198
Mid-Westen Total	3	27	161	137	91	94	129	73	715	1	37	269	247	221	238	271	151	1435	4	64	430	384	312	332	400	224	2150
Achham	0	0	7	4	4	5	2	0	22	0	0	13	20	18	11	8	4	74	0	0	20	24	22	16	10	4	96
Baitadi	1	2	6	8	7	4	3	3	34	0	1	12	11	17	19	17	6	83	1	3	18	19	24	23	20	9	117
Bajhang	0	0	7	13	3	3	2	1	29	0	2	13	12	13	11	6	3	60	0	2	20	25	16	14	8	4	89
Bajura	1	5	3	7	3	3	2	0	24	1	0	5	7	7	6	3	3	32	2	5	8	14	10	9	5	3	56
Dadeldhura	0	3	2	1	3	2	3	0	14	0	0	11	4	4	13	15	5	52	0	3	13	5	7	15	18	5	66
Darchula	0	4	10	8	2	4	4	1	33	0	1	6	12	7	6	4	2	38	0	5	16	20	9	10	8	3	71
Doti	0	1	6	5	2	2	1	2	19	0	1	5	16	5	11	5	5	48	0	2	11	21	7	13	6	7	67
Kailali	0	5	41	45	21	15	21	20	168	0	14	92	76	57	67	60	35	401	0	19	133	121	78	82	81	55	569
Kanchanpur	0	4	47	24	20	18	22	8	143	0	6	74	54	49	55	30	27	295	0	10	121	78	69	73	52	35	438
Far-Western Total	2	24	129	115	65	56	60	35	486	1	25	231	212	177	199	148	90	1083	3	49	360	327	242	255	208	125	1569
Grand Total	**15**	**195**	**1227**	**1036**	**666**	**638**	**643**	**397**	**4817**	**9**	**241**	**1906**	**1756**	**1644**	**1708**	**1773**	**1203**	**10240**	**24**	**436**	**3133**	**2792**	**2310**	**2346**	**2416**	**1600**	**15057**

Annual Sputum Conversion Report 2068/69 July 2011-July 2012

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)															
	New Smear Positive														
District	No. Registered		Negative		Positive		Died		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Bhojpur	14	29	12	27	2	1	0	1	0	0	0	0	86%	93%	91%
Dhankuta	13	46	11	42	2	3	0	1	0	0	0	0	85%	91%	90%
Ilam	18	54	16	52	0	0	0	1	2	0	0	1	89%	96%	94%
Jhapa	213	444	183	411	21	23	3	4	4	2	2	4	86%	93%	90%
Khotang	20	24	17	21	1	2	1	0	0	1	1	0	85%	88%	86%
Morang	197	380	174	328	8	26	8	11	1	4	6	11	88%	86%	87%
Okhaldhunga	19	25	18	22	0	3	1	0	0	0	0	0	95%	88%	91%
Panchthar	19	51	18	49	0	0	0	0	0	0	1	2	95%	96%	96%
Sankhuwasabha	10	33	10	30	0	2	0	0	0	0	0	1	100%	91%	93%
Saptari	75	167	72	158	2	3	1	3	0	0	0	3	96%	95%	95%
Siraha	94	253	86	225	1	9	5	13	1	1	1	5	91%	89%	90%
Solukhumbu	13	14	13	14	0	0	0	0	0	0	0	0	100%	100%	100%
Sunsari	125	367	103	309	11	33	4	9	1	7	6	9	82%	84%	84%
Taplejung	7	19	6	17	0	1	0	0	0	0	1	1	86%	89%	88%
Terhathum	2	13	2	13	0	0	0	0	0	0	0	0	100%	100%	100%
Udayapur	59	101	56	98	3	3	0	0	0	0	0	0	95%	97%	96%
Eastern Total	898	2020	797	1816	51	109	23	43	9	15	18	37	89%	90%	90%
Bara	156	329	146	295	3	8	1	1	1	4	5	21	94%	90%	91%
Bhaktapur	69	130	64	119	4	7	0	1	1	2	0	1	93%	92%	92%
Chitawan	130	303	120	274	5	11	2	5	2	4	1	9	92%	90%	91%
Dhading	27	112	25	107	1	3	1	0	0	2	0	0	93%	96%	95%
Dhanusha	117	270	107	243	2	3	4	10	0	0	4	14	91%	90%	90%
Dolkha	8	25	7	24	0	0	0	0	0	1	1	0	88%	96%	94%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)															
	New Smear Positive														
District	No. Registered		Negative		Positive		Died		Transfer Out		No result		Conversion Rate		
Kathmandu	407	666	345	576	27	46	4	12	18	20	13	12	85%	86%	86%
Kavre	57	118	52	103	5	10	0	5	0	0	0	0	91%	87%	89%
Lalitpur	104	157	90	140	12	11	0	0	2	4	0	2	87%	89%	88%
Mahottari	140	250	128	232	2	3	4	0	1	2	5	13	91%	93%	92%
Makawanpur	112	242	109	218	1	7	0	7	2	10	0	0	97%	90%	92%
Nuwakot	21	79	20	78	0	0	0	0	0	0	1	1	95%	99%	98%
Parsa	131	249	124	231	3	9	1	3	1	0	2	6	95%	93%	93%
Ramechhap	22	39	21	39	0	0	1	0	0	0	0	0	95%	100%	98%
Rasuwa	9	19	9	18	0	1	0	0	0	0	0	0	100%	95%	96%
Rautahat	81	176	77	165	1	2	3	8	0	1	0	0	95%	94%	94%
Sarlahi	218	396	198	345	5	18	4	11	0	1	11	21	91%	87%	88%
Sindhuli	54	138	53	127	0	4	1	2	0	0	0	5	98%	92%	94%
Sindhupalchok	28	78	23	72	1	3	2	1	1	2	1	0	82%	92%	90%
Central Total	1891	3776	1718	3406	72	146	28	66	29	53	44	105	91%	90%	90%
Arghakhanchi	22	63	20	57	0	0	2	5	0	1	0	0	91%	90%	91%
Baglung	29	63	27	55	2	4	0	3	0	1	0	0	93%	87%	89%
Gorkha	40	96	34	79	5	13	1	3	0	1	0	0	85%	82%	83%
Gulmi	25	84	25	81	0	2	0	1	0	0	0	0	100%	96%	97%
Kapilbastu	128	280	116	235	6	20	3	13	0	0	3	12	91%	84%	86%
Kaski	68	130	53	111	7	7	5	7	3	5	0	0	78%	85%	83%
Lamjung	13	59	10	57	1	2	1	0	1	0	0	0	77%	97%	93%
Manang	0	3	0	3	0	0	0	0	0	0	0	0		100%	100%
Mustang	1	1	1	1	0	0	0	0	0	0	0	0	100%	100%	100%
Mygadi	14	20	13	16	1	2	0	1	0	0	0	1	93%	80%	85%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)															
	New Smear Positive														
District	No. Registered		Negative		Positive		Died		Transfer Out		No result		Conversion Rate		
Nawalparasi	124	310	112	287	4	13	5	2	2	4	1	4	90%	93%	92%
Palpa	43	107	43	90	0	10	0	6	0	0	0	1	100%	84%	89%
Parbat	11	37	9	32	1	2	0	3	1	0	0	0	82%	86%	85%
Rupandehi	220	467	206	428	5	16	8	12	0	2	1	9	94%	92%	92%
Syangja	35	97	33	88	2	5	0	4	0	0	0	0	94%	91%	92%
Tanahun	54	109	48	91	5	8	0	3	1	5	0	2	89%	83%	85%
Western Total	827	1926	750	1711	39	104	25	63	8	19	5	29	91%	89%	89%
Banke	140	322	118	265	15	38	4	4	1	2	2	13	84%	82%	83%
Bardiya	105	247	90	218	9	18	3	5	2	3	1	3	86%	88%	88%
Dailekh	22	68	18	59	2	5	2	1	0	3	0	0	82%	87%	86%
Dang	163	288	148	245	8	28	3	10	2	1	2	4	91%	85%	87%
Dolpa	0	6	0	2	0	0	0	0	0	0	0	4		33%	33%
Humla	6	3	5	0	0	0	0	0	0	0	1	3	83%	0%	56%
Jajarkot	18	30	15	24	3	3	0	0	0	1	0	2	83%	80%	81%
Jumla	7	21	7	21	0	0	0	0	0	0	0	0	100%	100%	100%
Kalikot	7	18	7	16	0	2	0	0	0	0	0	0	100%	89%	92%
Mugu	6	8	6	7	0	0	0	1	0	0	0	0	100%	88%	93%
Pyuthan	38	102	35	83	2	16	1	3	0	0	0	0	92%	81%	84%
Rolpa	63	78	47	62	10	10	2	2	0	0	4	4	75%	79%	77%
Rukum	46	44	38	35	2	6	1	0	4	3	1	0	83%	80%	81%
Salyan	30	66	24	55	4	7	2	1	0	1	0	2	80%	83%	82%
Surkhet	64	134	58	112	4	11	1	4	1	2	0	5	91%	84%	86%
Mid-Westen Total	715	1435	616	1204	59	144	19	31	10	16	11	40	86%	84%	85%
Achham	22	74	15	64	7	2	0	4	0	0	0	4	68%	86%	82%
Baitadi	34	83	31	70	2	9	1	3	0	0	0	1	91%	84%	86%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)															
	New Smear Positive														
District	No. Registered		Negative		Positive		Died		Transfer Out		No result		Conversion Rate		
Bajhang	29	60	25	53	2	2	0	3	0	0	2	2	86%	88%	88%
Bajura	24	32	22	28	1	2	0	0	0	2	1	0	92%	88%	89%
Dadeldhura	14	52	12	44	2	8	0	0	0	0	0	0	86%	85%	85%
Darchula	33	38	31	34	2	4	0	0	0	0	0	0	94%	89%	92%
Doti	19	48	15	40	1	2	0	2	0	1	3	3	79%	83%	82%
Kailali	168	401	158	340	5	34	2	12	1	9	2	6	94%	85%	88%
Kanchanpur	143	295	128	256	9	23	0	9	5	5	1	2	90%	87%	88%
Far-Western Total	486	1083	437	929	31	86	3	33	6	17	9	18	90%	86%	87%
Grand Total	4,817	10,240	4,318	9,066	252	589	98	236	62	120	87	229	90%	89%	89%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Relapse																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Bhojpur	0	5	0	5	0	0	0	0	0	0	0	0	0	0		100%	100%
Dhankuta	1	3	1	2	0	1	0	0	0	0	0	0	0	0	100%	67%	75%
Ilam	1	6	0	6	1	0	0	0	0	0	0	0	0	0	0%	100%	86%
Jhapa	32	78	29	68	1	3	2	3	0	1	0	3	0	0	91%	87%	88%
Khotang	1	3	1	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Morang	14	54	13	42	1	2	0	3	0	0	0	1	0	6	93%	78%	81%
Okhaldhunga	3	4	3	4	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Panchthar	1	4	1	4	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Sankhuwasabha	4	1	4	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Saptari	4	10	4	8	0	1	0	0	0	0	0	1	0	0	100%	80%	86%
Siraha	13	25	10	24	0	1	1	0	0	0	0	0	2	0	77%	96%	89%
Solukhumbu	0	4	0	4	0	0	0	0	0	0	0	0	0	0		100%	100%
Sunsari	5	43	5	36	0	5	0	0	0	0	0	1	0	1	100%	84%	85%
Taplejung	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Terhathum	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Udayapur	3	18	3	17	0	0	0	1	0	0	0	0	0	0	100%	94%	95%
Eastern Total	83	259	75	225	3	13	3	7	0	1	0	6	2	7	90%	87%	88%
Bara	21	35	21	33	0	0	0	2	0	0	0	0	0	0	100%	94%	96%
Bhaktapur	12	27	11	22	0	2	0	1	1	1	0	0	0	1	92%	81%	85%
Chitawan	21	74	18	67	1	1	1	3	0	0	0	2	1	1	86%	91%	89%
Dhading	5	19	5	17	0	1	0	1	0	0	0	0	0	0	100%	89%	92%
Dhanusha	13	44	13	40	0	0	0	3	0	0	0	1	0	0	100%	91%	93%
Dolkha	3	6	3	6	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Kathmandu	58	139	43	110	5	9	4	7	1	3	4	10	1	0	74%	79%	78%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Relapse																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Kavre	3	25	1	21	1	1	1	1	0	0	0	2	0	0	33%	84%	79%
Lalitpur	13	34	12	26	1	6	0	1	0	1	0	0	0	0	92%	76%	81%
Mahottari	6	23	6	22	0	1	0	0	0	0	0	0	0	0	100%	96%	97%
Makawanpur	16	49	16	48	0	1	0	0	0	0	0	0	0	0	100%	98%	98%
Nuwakot	2	17	2	17	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Parsa	9	36	8	31	0	2	0	0	1	1	0	0	0	2	89%	86%	87%
Ramechhap	1	9	1	9	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Rasuwa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rautahat	6	18	5	13	0	0	1	5	0	0	0	0	0	0	83%	72%	75%
Sarlahi	27	63	22	58	2	2	3	2	0	0	0	0	0	1	81%	92%	89%
Sindhuli	5	13	5	11	0	0	0	0	0	0	0	0	0	2	100%	85%	89%
Sindhupalchok	4	15	4	13	0	0	0	0	0	0	0	0	0	2	100%	87%	89%
Central Total	225	646	196	564	10	26	10	26	3	6	4	15	2	9	87%	87%	87%
Arghakhanchi	3	18	3	16	0	0	0	2	0	0	0	0	0	0	100%	89%	90%
Baglung	5	7	5	7	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Gorkha	3	16	3	13	0	1	0	1	0	0	0	1	0	0	100%	81%	84%
Gulmi	8	22	8	20	0	1	0	0	0	0	0	0	0	1	100%	91%	93%
Kapilbastu	7	30	6	24	1	1	0	2	0	0	0	0	0	3	86%	80%	81%
Kaski	9	21	9	13	0	2	0	3	0	1	0	2	0	0	100%	62%	73%
Lamjung	4	10	4	9	0	1	0	0	0	0	0	0	0	0	100%	90%	93%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mygadi	1	4	1	4	0	0	0	0	0	0	0	0	0	0	100%	100%	100%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Relapse																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Nawalparasi	15	53	14	47	1	3	0	2	0	1	0	0	0	0	93%	89%	90%
Palpa	4	25	4	22	0	2	0	0	0	1	0	0	0	0	100%	88%	90%
Parbat	2	6	2	5	0	0	0	1	0	0	0	0	0	0	100%	83%	88%
Rupandehi	29	70	25	66	1	1	1	1	0	1	2	0	0	1	86%	94%	92%
Syangja	9	23	9	23	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Tanahun	10	24	8	21	1	3	0	0	0	0	1	0	0	0	80%	88%	85%
Western Total	109	329	101	290	4	15	1	12	0	4	3	3	0	5	93%	88%	89%
Banke	19	53	18	42	1	5	0	4	0	1	0	1	0	0	95%	79%	83%
Bardiya	12	34	8	31	3	0	1	0	0	1	0	0	0	1	67%	91%	85%
Dailekh	0	6	0	3	0	1	0	1	0	0	0	1	0	0		50%	50%
Dang	26	75	23	62	0	5	1	6	2	1	0	1	0	0	88%	83%	84%
Dolpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Humla	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Jajarkot	5	5	4	4	0	1	0	0	0	0	0	0	1	0	80%	80%	80%
Jumla	0	3	0	2	0	1	0	0	0	0	0	0	0	0		67%	67%
Kalikot	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Mugu	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Pyuthan	6	20	4	19	1	1	1	0	0	0	0	0	0	0	67%	95%	88%
Rolpa	7	27	6	23	0	3	0	1	1	0	0	0	0	0	86%	85%	85%
Rukum	8	10	8	9	0	0	0	0	0	0	0	0	0	1	100%	90%	94%
Salyan	8	13	6	11	1	2	1	0	0	0	0	0	0	0	75%	85%	81%
Surkhet	4	25	3	22	0	2	0	0	1	0	0	0	0	2	75%	88%	86%
Mid-Westen Total	96	273	81	230	6	21	4	12	4	3	0	3	1	4	84%	84%	84%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Relapse																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Achham	6	6	5	6	0	0	1	0	0	0	0	0	0	0	83%	100%	92%
Baitadi	3	12	3	9	0	1	0	1	0	1	0	0	0	0	100%	75%	80%
Bajhang	4	9	3	7	0	1	0	0	0	0	0	0	1	1	75%	78%	77%
Bajura	0	2	0	1	0	0	0	0	0	1	0	0	0	0		50%	50%
Dadeldhura	1	3	1	1	0	1	0	0	0	1	0	0	0	0	100%	33%	50%
Darchula	3	9	3	8	0	0	0	0	0	1	0	0	0	0	100%	89%	92%
Doti	4	9	4	9	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Kailali	21	63	17	55	2	2	1	4	1	1	0	0	0	1	81%	87%	86%
Kanchanpur	18	87	18	67	0	8	0	6	0	1	0	1	0	4	100%	77%	81%
Far-Western Total	60	200	54	163	2	13	2	11	1	6	0	1	1	6	90%	82%	83%
Grand Total	573	1707	507	1472	25	88	20	68	8	20	7	28	6	31	88%	86%	87%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Failure																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Bhojpur	0	2	0	1	0	1	0	0	0	0	0	0	0	0		50%	50%
Dhankuta	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Ilam	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0%		0%
Jhapa	2	7	2	7	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Khotang	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Morang	2	4	2	3	0	1	0	0	0	0	0	0	0	0	100%	75%	83%
Okhaldhunga	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Panchthar	1	0	1	0	0	0	0	0	0	0	0	0	0	0	100%		100%
Sankhuwasabha	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Saptari	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Siraha	1	2	1	1	0	1	0	0	0	0	0	0	0	0	100%	50%	67%
Solukhumbu	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sunsari	3	4	2	4	0	0	0	0	0	0	0	0	1	0	67%	100%	86%
Taplejung	0	2	0	0	0	2	0	0	0	0	0	0	0	0		0%	0%
Terhathum	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Udayapur	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Eastern Total	10	24	8	19	0	5	0	0	0	0	0	0	2	0	80%	79%	79%
Bara	1	10	1	10	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Bhaktapur	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Chitawan	2	3	2	2	0	1	0	0	0	0	0	0	0	0	100%	67%	80%
Dhading	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Dhanusha	1	2	0	1	0	0	0	0	0	0	0	1	1	0	0%	50%	33%
Dolkha	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Failure																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Kathmandu	4	10	4	6	0	2	0	0	0	0	0	2	0	0	100%	60%	71%
Kavre	1	3	0	3	0	0	0	0	1	0	0	0	0	0	0%	100%	75%
Lalitpur	4	2	2	2	0	0	1	0	1	0	0	0	0	0	50%	100%	67%
Mahottari	1	5	1	5	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Makawanpur	0	3	0	3	0	0	0	0	0	0	0	0	0	0		100%	100%
Nuwakot	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Parsa	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Ramechhap	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rasuwa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rautahat	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0%		0%
Sarlahi	3	6	3	5	0	1	0	0	0	0	0	0	0	0	100%	83%	89%
Sindhuli	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sindhupalchok	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Central Total	18	45	13	38	0	4	2	0	2	0	0	3	1	0	72%	84%	81%
Arghakhanchi	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Baglung	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Gorkha	1	3	1	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Gulmi	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%
Kapilbastu	1	6	1	4	0	0	0	1	0	0	0	0	0	1	100%	67%	71%
Kaski	2	4	1	3	0	0	1	0	0	1	0	0	0	0	50%	75%	67%
Lamjung	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mygadi	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Failure																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Nawalparasi	1	8	1	6	0	0	0	2	0	0	0	0	0	0	100%	75%	78%
Palpa	2	4	2	3	0	1	0	0	0	0	0	0	0	0	100%	75%	83%
Parbat	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rupandehi	4	6	2	6	2	0	0	0	0	0	0	0	0	0	50%	100%	80%
Syangja	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Tanahun	3	3	2	1	1	2	0	0	0	0	0	0	0	0	67%	33%	50%
Western Total	14	38	10	30	3	3	1	3	0	1	0	0	0	1	71%	79%	77%
Banke	2	4	2	2	0	0	0	1	0	0	0	0	0	1	100%	50%	67%
Bardiya	1	5	1	3	0	0	0	0	0	0	0	1	0	1	100%	60%	67%
Dailekh	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Dang	0	7	0	6	0	0	0	0	0	0	0	0	0	1		86%	86%
Dolpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Humla	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Jajarkot	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Jumla	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Kalikot	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mugu	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pyuthan	2	1	1	1	0	0	1	0	0	0	0	0	0	0	50%	100%	67%
Rolpa	2	3	2	2	0	1	0	0	0	0	0	0	0	0	100%	67%	80%
Rukum	0	1	0	0	0	0	0	0	0	0	0	0	0	1		0%	0%
Salyan	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Surkhet	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Mid-Westen Total	7	25	6	18	0	1	1	1	0	0	0	1	0	4	86%	72%	75%
Achham	3	2	2	2	1	0	0	0	0	0	0	0	0	0	67%	100%	80%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Failure																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Baitadi	0	3	0	2	0	0	0	0	0	1	0	0	0	0		67%	67%
Bajhang	1	0	1	0	0	0	0	0	0	0	0	0	0	0	100%		100%
Bajura	1	2	0	2	1	0	0	0	0	0	0	0	0	0	0%	100%	67%
Dadeldhura	1	3	1	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Darchula	0	3	0	3	0	0	0	0	0	0	0	0	0	0		100%	100%
Doti	2	6	2	6	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Kailali	5	12	5	9	0	3	0	0	0	0	0	0	0	0	100%	75%	82%
Kanchanpur	4	5	3	4	0	1	0	0	0	0	0	0	1	0	75%	80%	78%
Far-Western Total	17	36	14	31	2	4	0	0	0	1	0	0	1	0	82%	86%	85%
Grand Total	66	168	51	136	5	17	4	4	2	2	0	4	4	5	77%	81%	80%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Return After Defaulter																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Bhojpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Dhankuta	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Ilam	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Jhapa	1	6	0	4	0	1	0	0	0	0	0	1	1	0	0%	67%	57%
Khotang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Morang	2	6	0	3	2	0	0	2	0	0	0	0	0	1	0%	50%	38%
Okhaldhunga	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%
Panchthar	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sankhuwasabha	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Saptari	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Siraha	2	2	2	2	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Solukhumbu	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sunsari	2	11	1	9	0	0	0	1	0	0	0	1	1	0	50%	82%	77%
Taplejung	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Terhathum	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Udayapur	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Eastern Total	7	29	3	22	2	1	0	3	0	0	0	2	2	1	43%	76%	69%
Bara	2	0	2	0	0	0	0	0	0	0	0	0	0	0	100%		100%
Bhaktapur	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Chitawan	1	7	0	6	0	0	0	0	1	0	0	0	0	1	0%	86%	75%
Dhading	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Dhanusha	1	4	1	2	0	0	0	0	0	1	0	0	0	1	100%	50%	60%
Dolkha	1	2	1	2	0	0	0	0	0	0	0	0	0	0	100%	100%	100%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Return After Defaulter																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Kathmandu	4	13	4	10	0	1	0	0	0	2	0	0	0	0	100%	77%	82%
Kavre	1	3	1	2	0	0	0	1	0	0	0	0	0	0	100%	67%	75%
Lalitpur	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Mahottari	2	3	2	2	0	1	0	0	0	0	0	0	0	0	100%	67%	80%
Makawanpur	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Nuwakot	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Parsa	2	7	2	7	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Ramechhap	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rasuwa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Rautahat	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Sarlahi	0	9	0	8	0	0	0	0	0	0	0	0	0	1		89%	89%
Sindhuli	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Sindhupalchok	0	3	0	2	0	0	0	1	0	0	0	0	0	0		67%	67%
Central Total	14	56	13	46	0	2	0	2	1	3	0	0	0	3	93%	82%	84%
Arghakhanchi	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Baglung	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Gorkha	1	1	1	0	0	1	0	0	0	0	0	0	0	0	100%	0%	50%
Gulmi	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Kapilbastu	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Kaski	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Lamjung	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Return After Defaulter																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Mygadi	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Nawalparasi	0	3	0	2	0	0	0	0	0	1	0	0	0	0		67%	67%
Palpa	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Parbat	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%
Rupandehi	1	8	1	8	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Syangja	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Tanahun	0	5	0	5	0	0	0	0	0	0	0	0	0	0		100%	100%
Western Total	5	25	5	23	0	1	0	0	0	1	0	0	0	0	100%	92%	93%
Banke	2	9	1	8	1	1	0	0	0	0	0	0	0	0	50%	89%	82%
Bardiya	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Dailekh	0	3	0	2	0	1	0	0	0	0	0	0	0	0		67%	67%
Dang	2	2	1	2	0	0	0	0	0	0	0	0	1	0	50%	100%	75%
Dolpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Humla	0	0	0	1	0	0	0	0	0	0	0	0	0	0			
Jajarkot	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Jumla	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Kalikot	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Mugu	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pyuthan	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0%		0%
Rolpa	0	1	0	0	0	0	0	0	0	0	0	1	0	0		0%	0%
Rukum	0	1	0	0	0	0	0	0	0	0	0	0	0	0		0%	0%
Salyan	0	3	0	3	0	0	0	0	0	0	0	0	0	0		100%	100%
Surkhet	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%
Mid-Westen Total	6	24	3	21	2	2	0	0	0	0	0	1	1	0	50%	88%	80%

Annual SPUTUM CONVERSION REPORT 2068/69 (2011/12)																	
	Return After Defaulter																
District	No. Registered		Negative		Positive		Died		Defaulted		Transfer Out		No result		Conversion Rate		
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Total
Achham	1	3	1	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Baitadi	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%
Bajhang	1	2	1	1	0	0	0	1	0	0	0	0	0	0	100%	50%	67%
Bajura	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%
Dadeldhura	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Darchula	2	1	2	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%
Doti	0	4	0	4	0	0	0	0	0	0	0	0	0	0		100%	100%
Kailali	2	16	2	12	0	0	0	0	0	1	0	0	0	3	100%	75%	78%
Kanchanpur	0	5	0	4	0	1	0	0	0	0	0	0	0	0		80%	80%
Far-Western Total	6	34	6	28	0	1	0	1	0	1	0	0	0	3	100%	82%	85%
Grand Total	38	168	30	140	4	7	0	6	1	5	0	3	3	7	79%	83%	83%

Treatment Outcome Report 2067/68 July 2010-July 2011

Treatment Outcome Report 2067-68(2010/11)																									
District	New Smear Positive																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Bhojpur	12	30	10	26	0	1	0	1	0	1	0	1	2	0	0	0	83%	87%	86%	88%	2%	2%	2%	5%	0%
Dhankuta	9	33	7	32	0	0	0	0	1	1	0	0	1	0	0	0	78%	97%	93%	93%	0%	5%	0%	2%	0%
Ilam	16	37	14	30	1	1	1	0	0	2	0	3	0	1	0	0	88%	81%	83%	87%	2%	4%	6%	2%	0%
Jhapa	230	450	211	410	3	9	3	5	7	7	1	9	5	10	0	0	92%	91%	91%	93%	1%	2%	1%	2%	0%
Khotang	13	28	12	26	0	0	1	2	0	0	0	0	0	0	0	0	92%	93%	93%	93%	7%	0%	0%	0%	0%
Morang	188	444	164	374	3	13	3	4	7	16	5	28	6	9	0	0	87%	84%	85%	88%	1%	4%	5%	2%	0%
Okhaldhunga	11	14	9	12	0	0	0	0	0	0	0	0	2	2	0	0	82%	86%	84%	84%	0%	0%	0%	16%	0%
Panchthar	16	43	16	38	0	3	0	0	0	1	0	0	0	1	0	0	100%	88%	92%	97%	0%	2%	0%	2%	0%
Sankhuwasabha	13	33	13	31	0	0	0	0	0	0	0	2	0	0	0	0	100%	94%	96%	96%	0%	0%	4%	0%	0%
Saptari	79	217	74	200	0	0	0	2	4	12	0	0	1	3	0	0	94%	92%	93%	93%	1%	5%	0%	1%	0%
Siraha	113	261	108	232	1	2	1	4	3	11	0	8	0	4	0	0	96%	89%	91%	92%	1%	4%	2%	1%	0%
Solukhumbu	14	8	13	8	0	0	0	0	0	0	0	0	1	0	0	0	93%	100%	95%	95%	0%	0%	0%	5%	0%
Sunsari	146	320	123	265	0	4	2	5	9	11	5	28	7	7	0	0	84%	83%	83%	84%	2%	4%	7%	3%	0%
Taplejung	14	17	12	16	2	1	0	0	0	0	0	0	0	0	0	0	86%	94%	90%	100%	0%	0%	0%	0%	0%
Terhathum	3	20	3	20	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Udayapur	36	104	36	98	0	1	0	0	0	3	0	2	0	0	0	0	100%	94%	96%	96%	0%	2%	1%	0%	0%
Eastern Total	913	2,059	825	1,818	10	35	11	23	31	65	11	81	25	37	-	-	90%	88%	89%	90%	1%	3%	3%	2%	0%
Bara	170	328	141	265	19	37	0	7	7	15	3	3	0	0	0	1	83%	81%	82%	93%	1%	4%	1%	0%	0%
Bhaktapur	66	129	63	121	0	0	1	2	1	2	0	2	1	2	0	0	95%	94%	94%	94%	2%	2%	1%	2%	0%
Chitawan	137	305	122	261	1	9	4	3	1	5	3	11	6	16	0	0	89%	86%	87%	89%	2%	1%	3%	5%	0%
Dhading	29	103	29	97	0	2	0	0	0	3	0	1	0	0	0	0	100%	94%	95%	97%	0%	2%	1%	0%	0%
Dhanusha	110	261	94	213	7	10	0	2	2	15	4	16	3	5	0	0	85%	82%	83%	87%	1%	5%	5%	2%	0%
Dolkha	10	20	10	16	0	1	0	0	0	3	0	0	0	0	0	0	100%	80%	87%	90%	0%	10%	0%	0%	0%
Kathmandu	421	636	349	498	6	23	7	6	6	13	7	26	45	66	1	4	83%	78%	80%	83%	1%	2%	3%	11%	0%
Kavre	39	100	35	88	1	0	2	5	1	5	0	1	0	1	0	0	90%	88%	88%	89%	5%	4%	1%	1%	0%
Lalitpur	83	188	80	177	0	0	3	2	0	4	0	2	0	3	0	0	96%	94%	95%	95%	2%	1%	1%	1%	0%
Mahottari	111	273	100	238	5	16	0	4	1	4	5	9	0	2	0	0	90%	87%	88%	93%	1%	1%	4%	1%	0%
Makawanpur	100	207	91	189	4	9	2	1	3	5	0	0	0	2	0	1	91%	91%	91%	95%	1%	3%	0%	1%	0%
Nuwakot	32	81	28	69	3	8	0	1	1	3	0	0	0	0	0	0	88%	85%	86%	96%	1%	4%	0%	0%	0%
Parsa	120	278	110	253	4	5	0	0	2	9	3	5	0	4	1	2	92%	91%	91%	93%	0%	3%	2%	1%	1%

Treatment Outcome Report 2067-68(2010/11)																									
District	New Smear Positive																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Ramechhap	19	56	19	51	0	0	0	1	0	3	0	0	0	1	0	0	100%	91%	93%	93%	1%	4%	0%	1%	0%
Rasuwa	6	11	6	10	0	0	0	0	0	1	0	0	0	0	0	0	100%	91%	94%	94%	0%	6%	0%	0%	0%
Rautahat	101	230	97	218	0	0	0	1	3	8	0	2	1	1	0	0	96%	95%	95%	95%	0%	3%	1%	1%	0%
Sarlahi	153	327	131	280	6	13	2	7	6	7	5	18	3	2	0	0	86%	86%	86%	90%	2%	3%	5%	1%	0%
Sindhuli	36	97	35	88	0	0	0	0	0	4	1	4	0	1	0	0	97%	91%	92%	92%	0%	3%	4%	1%	0%
Sindhupalchok	33	81	27	70	3	4	0	0	2	3	0	2	1	2	0	0	82%	86%	85%	91%	0%	4%	2%	3%	0%
Central Total	1,776	3,711	1,567	3,202	59	137	21	42	36	112	31	102	60	108	2	8	88%	86%	87%	90%	1%	3%	2%	3%	0%
Arghakhanchi	24	66	19	59	1	1	0	0	4	5	0	0	0	1	0	0	79%	89%	87%	89%	0%	10%	0%	1%	0%
Baglung	27	42	25	35	0	0	0	1	0	2	0	4	2	0	0	0	93%	83%	87%	87%	1%	3%	6%	3%	0%
Gorkha	47	107	43	88	2	5	0	1	0	8	0	4	2	1	0	0	91%	82%	85%	90%	1%	5%	3%	2%	0%
Gulmi	37	106	35	101	0	0	1	2	1	2	0	1	0	0	0	0	95%	95%	95%	95%	2%	2%	1%	0%	0%
Kapilbastu	94	298	75	263	0	0	0	5	12	13	6	16	1	1	0	0	80%	88%	86%	86%	1%	6%	6%	1%	0%
Kaski	66	129	58	115	0	0	1	3	2	7	3	0	2	4	0	0	88%	89%	89%	89%	2%	5%	2%	3%	0%
Lamjung	14	51	13	46	0	0	0	2	1	2	0	1	0	0	0	0	93%	90%	91%	91%	3%	5%	2%	0%	0%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mustang	0	5	0	4	0	0	0	0	0	1	0	0	0	0	0	0		80%	80%	80%	0%	20%	0%	0%	0%
Mygadi	15	20	15	14	0	2	0	2	0	0	0	1	0	1	0	0	100%	70%	83%	89%	6%	0%	3%	3%	0%
Nawalparasi	125	300	115	270	1	2	1	4	4	12	1	8	2	4	1	0	92%	90%	91%	91%	1%	4%	2%	1%	0%
Palpa	49	114	42	108	1	0	1	1	4	2	1	3	0	0	0	0	86%	95%	92%	93%	1%	4%	2%	0%	0%
Parbat	9	30	8	24	1	0	0	0	0	4	0	1	0	1	0	0	89%	80%	82%	85%	0%	10%	3%	3%	0%
Rupandehi	208	481	197	442	0	0	3	9	6	20	1	5	1	5	0	0	95%	92%	93%	93%	2%	4%	1%	1%	0%
Syangja	38	90	34	75	1	4	0	0	2	9	1	2	0	0	0	0	89%	83%	85%	89%	0%	9%	2%	0%	0%
Tanahun	65	109	59	95	1	1	2	2	1	4	0	3	2	4	0	0	91%	87%	89%	90%	2%	3%	2%	3%	0%
Western Total	818	1,948	738	1,739	8	15	9	32	37	91	13	49	12	22	1	-	90%	89%	90%	90%	1%	5%	2%	1%	0%
Banke	155	332	135	280	6	7	2	6	7	10	2	17	2	11	1	1	87%	84%	85%	88%	2%	3%	4%	3%	0%
Bardiya	108	241	93	199	3	7	2	6	6	13	3	12	1	4	0	0	86%	83%	84%	87%	2%	5%	4%	1%	0%
Dailekh	20	50	18	41	1	0	0	1	0	5	1	3	0	0	0	0	90%	82%	84%	86%	1%	7%	6%	0%	0%
Dang	166	329	154	288	2	6	2	3	4	11	3	16	1	5	0	0	93%	88%	89%	91%	1%	3%	4%	1%	0%
Dolpa	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Humla	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Jajarkot	19	29	18	24	0	3	0	1	0	1	1	0	0	0	0	0	95%	83%	88%	94%	2%	2%	2%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	New Smear Positive																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Jumla	14	17	8	8	3	7	0	0	1	0	0	1	2	0	0	1	57%	47%	52%	84%	0%	3%	3%	6%	3%
Kalikot	17	9	14	8	2	0	0	1	0	0	0	0	1	0	0	0	82%	89%	85%	92%	4%	0%	0%	4%	0%
Mugu	3	6	2	6	0	0	0	0	0	0	0	0	1	0	0	0	67%	100%	89%	89%	0%	0%	0%	11%	0%
Pyuthan	50	81	47	71	0	2	1	0	2	5	0	3	0	0	0	0	94%	88%	90%	92%	1%	5%	2%	0%	0%
Rolpa	46	77	39	70	0	3	3	1	1	2	3	1	0	0	0	0	85%	91%	89%	91%	3%	2%	3%	0%	0%
Rukum	36	60	31	52	0	3	2	0	2	3	0	0	1	1	0	1	86%	87%	86%	90%	2%	5%	0%	2%	1%
Salyan	31	70	28	65	1	0	0	0	1	0	0	1	1	4	0	0	90%	93%	92%	93%	0%	1%	1%	5%	0%
Surkhet	58	123	49	96	2	7	1	2	3	4	1	8	2	5	0	1	84%	78%	80%	85%	2%	4%	5%	4%	1%
Mid-Westen Total	723	1,430	636	1,214	20	45	13	21	27	54	14	62	12	30	1	4	88%	85%	86%	89%	2%	4%	4%	2%	0%
Achham	42	73	35	57	0	1	1	2	4	9	0	4	2	0	0	0	83%	78%	80%	81%	3%	11%	3%	2%	0%
Baitadi	37	80	32	66	1	6	1	3	1	2	2	3	0	0	0	0	86%	83%	84%	90%	3%	3%	4%	0%	0%
Bajhang	25	37	24	34	1	1	0	0	0	1	0	1	0	0	0	0	96%	92%	94%	97%	0%	2%	2%	0%	0%
Bajura	19	29	15	26	2	0	1	0	0	2	1	1	0	0	0	0	79%	90%	85%	90%	2%	4%	4%	0%	0%
Dadeldhura	18	36	18	29	0	2	0	0	0	3	0	1	0	1	0	0	100%	81%	87%	91%	0%	6%	2%	2%	0%
Darchula	24	40	22	40	1	0	0	0	1	0	0	0	0	0	0	0	92%	100%	97%	98%	0%	2%	0%	0%	0%
Doti	29	88	16	55	4	15	1	2	4	10	3	6	1	0	0	0	55%	63%	61%	77%	3%	12%	8%	1%	0%
Kailali	178	395	158	345	4	4	4	14	8	15	3	12	1	5	0	0	89%	87%	88%	89%	3%	4%	3%	1%	0%
Kanchanpur	139	333	131	301	0	1	3	5	2	12	0	6	3	6	0	2	94%	90%	92%	92%	2%	3%	1%	2%	0%
Far-Western Total	511	1,111	451	953	13	30	11	26	20	54	9	34	7	12	-	2	88%	86%	87%	89%	2%	5%	3%	1%	0%
Grand Total	4,741	10,259	4,217	8,926	110	262	65	144	151	376	78	328	116	209	4	14	89%	87%	88%	90%	1%	4%	3%	2%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Relapse																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Bhojpur	1	3	1	2	0	1	0	0	0	0	0	0	0	0	0	0	100%	67%	75%	100%	0%	0%	0%	0%	0%
Dhankuta	1	4	1	4	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Ilam	2	9	2	7	0	0	0	0	0	1	0	1	0	0	0	0	100%	78%	82%	82%	0%	9%	9%	0%	0%
Jhapa	20	61	17	53	0	0	0	3	2	2	0	2	1	1	0	0	85%	87%	86%	86%	4%	5%	2%	2%	0%
Khotang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Morang	18	64	14	55	1	0	2	1	0	4	1	2	0	2	0	0	78%	86%	84%	85%	4%	5%	4%	2%	0%
Okhaldhunga	4	3	2	2	0	0	0	0	2	1	0	0	0	0	0	0	50%	67%	57%	57%	0%	43%	0%	0%	0%
Panchthar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Sankhuwasabha	2	5	2	5	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Saptari	1	13	1	12	0	0	0	0	0	1	0	0	0	0	0	0	100%	92%	93%	93%	0%	7%	0%	0%	0%
Siraha	5	35	5	28	0	0	0	2	0	3	0	2	0	0	0	0	100%	80%	83%	83%	5%	8%	5%	0%	0%
Solukhumbu	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Sunsari	12	45	10	36	0	2	1	2	0	2	0	1	1	2	0	0	83%	80%	81%	84%	5%	4%	2%	5%	0%
Taplejung	2	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Terhathum	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Udayapur	3	17	2	16	0	0	0	0	1	1	0	0	0	0	0	0	67%	94%	90%	90%	0%	10%	0%	0%	0%
Eastern Total	75	263	63	224	1	3	3	8	5	15	1	8	2	5	-	-	84%	85%	85%	86%	3%	6%	3%	2%	0%
Bara	11	37	11	36	0	0	0	1	0	0	0	0	0	0	0	0	100%	97%	98%	98%	2%	0%	0%	0%	0%
Bhaktapur	16	37	13	28	0	3	2	1	0	2	0	2	1	1	0	0	81%	76%	77%	83%	6%	4%	4%	4%	0%
Chitawan	30	68	24	55	1	2	2	3	1	4	1	2	1	2	0	0	80%	81%	81%	84%	5%	5%	3%	3%	0%
Dhading	5	23	5	20	0	1	0	0	0	2	0	0	0	0	0	0	100%	87%	89%	93%	0%	7%	0%	0%	0%
Dhanusha	12	41	10	36	0	2	0	0	0	1	1	1	1	1	0	0	83%	88%	87%	91%	0%	2%	4%	4%	0%
Dolkha	0	6	0	4	0	1	0	0	0	1	0	0	0	0	0	0		67%	67%	83%	0%	17%	0%	0%	0%
Kathmandu	66	130	57	103	0	5	3	1	1	4	1	3	4	13	0	1	86%	79%	82%	84%	2%	3%	2%	9%	1%
Kavre	6	15	6	14	0	0	0	0	0	1	0	0	0	0	0	0	100%	93%	95%	95%	0%	5%	0%	0%	0%
Lalitpur	22	35	17	27	0	1	1	3	2	2	1	2	1	0	0	0	77%	77%	77%	79%	7%	7%	5%	2%	0%
Mahottari	5	28	4	25	0	1	0	0	1	1	0	1	0	0	0	0	80%	89%	88%	91%	0%	6%	3%	0%	0%
Makawanpur	11	49	11	44	0	0	0	0	0	4	0	1	0	0	0	0	100%	90%	92%	92%	0%	7%	2%	0%	0%
Nuwakot	3	29	2	23	0	5	0	0	1	0	0	0	0	1	0	0	67%	79%	78%	94%	0%	3%	0%	3%	0%
Parsa	8	30	7	26	0	0	0	0	1	2	0	1	0	0	0	1	88%	87%	87%	87%	0%	8%	3%	0%	3%

Treatment Outcome Report 2067-68(2010/11)																									
District	Relapse																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Ramechhap	3	7	3	7	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Rasuwa	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Rautahat	5	20	4	20	0	0	0	0	1	0	0	0	0	0	0	0	80%	100%	96%	96%	0%	4%	0%	0%	0%
Sarlahi	17	56	17	50	0	0	0	0	0	1	0	3	0	2	0	0	100%	89%	92%	92%	0%	1%	4%	3%	0%
Sindhuli	3	25	3	24	0	0	0	0	0	1	0	0	0	0	0	0	100%	96%	96%	96%	0%	4%	0%	0%	0%
Sindhupalchok	10	14	8	12	1	0	0	0	0	0	1	2	0	0	0	0	80%	86%	83%	88%	0%	0%	13%	0%	0%
Central Total	234	651	203	555	2	21	8	9	8	26	5	18	8	20	-	2	87%	85%	86%	88%	2%	4%	3%	3%	0%
Arghakhanchi	3	18	3	14	0	1	0	0	0	3	0	0	0	0	0	0	100%	78%	81%	86%	0%	14%	0%	0%	0%
Baglung	1	12	1	12	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Gorkha	7	30	4	24	1	1	0	0	0	5	0	0	2	0	0	0	57%	80%	76%	81%	0%	14%	0%	5%	0%
Gulmi	5	16	5	12	0	0	0	2	0	1	0	1	0	0	0	0	100%	75%	81%	81%	10%	5%	5%	0%	0%
Kapilbastu	8	37	8	29	0	0	0	7	0	1	0	0	0	0	0	0	100%	78%	82%	82%	16%	2%	0%	0%	0%
Kaski	10	28	9	21	0	0	1	1	0	2	0	1	0	3	0	0	90%	75%	79%	79%	5%	5%	3%	8%	0%
Lamjung	5	10	4	7	0	0	1	2	0	0	0	0	0	0	0	1	80%	70%	73%	73%	20%	0%	0%	0%	7%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mygadi	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Nawalparasi	28	71	28	62	0	2	0	0	0	3	0	2	0	2	0	0	100%	87%	91%	93%	0%	3%	2%	2%	0%
Palpa	6	14	6	13	0	0	0	0	0	1	0	0	0	0	0	0	100%	93%	95%	95%	0%	5%	0%	0%	0%
Parbat	4	5	3	5	0	0	0	0	1	0	0	0	0	0	0	0	75%	100%	89%	89%	0%	11%	0%	0%	0%
Rupandehi	26	113	19	96	1	1	2	5	3	7	0	1	0	3	1	0	73%	85%	83%	84%	5%	7%	1%	2%	1%
Syangja	7	31	6	27	0	0	0	1	1	2	0	1	0	0	0	0	86%	87%	87%	87%	3%	8%	3%	0%	0%
Tanahun	11	30	11	22	0	0	0	1	0	4	0	1	0	2	0	0	100%	73%	80%	80%	2%	10%	2%	5%	0%
Western Total	121	418	107	347	2	5	4	19	5	29	-	7	2	10	1	1	88%	83%	84%	86%	4%	6%	1%	2%	0%
Banke	15	52	11	40	0	2	2	1	0	4	2	3	0	2	0	0	73%	77%	76%	79%	4%	6%	7%	3%	0%
Bardiya	10	38	8	37	0	1	0	0	0	0	2	0	0	0	0	0	80%	97%	94%	96%	0%	0%	4%	0%	0%
Dailekh	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Dang	35	71	33	60	0	0	2	1	0	7	0	2	0	1	0	0	94%	85%	88%	88%	3%	7%	2%	1%	0%
Dolpa	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Humla	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Jajarkot	3	4	3	3	0	0	0	0	0	1	0	0	0	0	0	0	100%	75%	86%	86%	0%	14%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Relapse																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Jumla	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Kalikot	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Mugu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Pyuthan	5	25	5	23	0	0	0	0	0	1	0	1	0	0	0	0	100%	92%	93%	93%	0%	3%	3%	0%	0%
Rolpa	11	19	9	16	0	0	1	1	0	2	1	0	0	0	0	0	82%	84%	83%	83%	7%	7%	3%	0%	0%
Rukum	5	13	3	13	1	0	0	0	0	0	0	0	1	0	0	0	60%	100%	89%	94%	0%	0%	0%	6%	0%
Salyan	2	18	2	16	0	0	0	0	0	0	0	0	0	2	0	0	100%	89%	90%	90%	0%	0%	0%	10%	0%
Surkhet	1	23	1	19	0	0	0	0	0	1	0	1	0	2	0	0	100%	83%	83%	83%	0%	4%	4%	8%	0%
Mid-Westen Total	92	268	80	232	1	3	5	3	-	16	5	7	1	7	-	-	87%	87%	87%	88%	2%	4%	3%	2%	0%
Achham	3	11	2	11	0	0	1	0	0	0	0	0	0	0	0	0	67%	100%	93%	93%	7%	0%	0%	0%	0%
Baitadi	2	9	2	7	0	1	0	1	0	0	0	0	0	0	0	0	100%	78%	82%	91%	9%	0%	0%	0%	0%
Bajhang	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Bajura	1	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0	100%	50%	67%	67%	33%	0%	0%	0%	0%
Dadeldhura	2	5	2	4	0	0	0	1	0	0	0	0	0	0	0	0	100%	80%	86%	86%	14%	0%	0%	0%	0%
Darchula	2	6	2	3	0	0	0	0	0	0	0	0	0	0	0	3	100%	50%	63%	63%	0%	0%	0%	0%	38%
Doti	4	7	3	6	0	0	0	0	1	0	0	1	0	0	0	0	75%	86%	82%	82%	0%	9%	9%	0%	0%
Kailali	23	78	21	60	0	3	0	5	1	4	1	5	0	1	0	0	91%	77%	80%	83%	5%	5%	6%	1%	0%
Kanchanpur	18	57	18	46	0	1	0	2	0	6	0	0	0	0	0	2	100%	81%	85%	87%	3%	8%	0%	0%	3%
Far-Western Total	60	180	56	143	-	5	1	10	2	10	1	6	-	1	-	5	93%	79%	83%	85%	5%	5%	3%	0%	2%
Grand Total	582	1,780	509	1,501	6	37	21	49	20	96	12	46	13	43	1	8	87%	84%	85%	87%	3%	5%	2%	2%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Failure																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Bhojpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Dhankuta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Ilam	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Jhapa	3	10	3	9	0	0	0	0	0	0	0	1	0	0	0	0	100%	90%	92%	92%	0%	0%	8%	0%	0%
Khotang	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Morang	1	3	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0%	100%	75%	75%	0%	25%	0%	0%	0%
Okhaldhunga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Panchthar	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0		0%	0%	0%	0%	100%	0%	0%	0%
Sankhuwasabha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Saptari	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Siraha	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Solukhumbu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Sunsari	3	5	2	2	0	1	0	1	1	0	0	1	0	0	0	0	67%	40%	50%	63%	13%	13%	13%	0%	0%
Taplejung	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Terhathum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Udayapur	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Eastern Total	11	33	9	28	-	1	-	1	2	1	-	2	-	-	-	-	82%	85%	84%	86%	2%	7%	5%	0%	0%
Bara	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Bhaktapur	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0%	100%	50%	50%	50%	0%	0%	0%	0%
Chitawan	8	5	6	4	0	0	2	1	0	0	0	0	0	0	0	0	75%	80%	77%	77%	23%	0%	0%	0%	0%
Dhading	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Dhanusha	0	3	0	1	0	0	0	0	0	1	0	1	0	0	0	0		33%	33%	33%	0%	33%	33%	0%	0%
Dolkha	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Kathmandu	13	16	5	13	2	0	5	2	0	0	0	0	1	1	0	0	38%	81%	62%	69%	24%	0%	0%	7%	0%
Kavre	3	5	3	4	0	1	0	0	0	0	0	0	0	0	0	0	100%	80%	88%	100%	0%	0%	0%	0%	0%
Lalitpur	4	4	2	3	0	0	2	1	0	0	0	0	0	0	0	0	50%	75%	63%	63%	38%	0%	0%	0%	0%
Mahottari	0	3	0	2	0	0	0	0	0	0	0	1	0	0	0	0		67%	67%	67%	0%	0%	33%	0%	0%
Makawanpur	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Nuwakot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Parsa	0	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0		50%	50%	50%	0%	0%	50%	0%	0%
Ramechhap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									

Treatment Outcome Report 2067-68(2010/11)																									
District	Failure																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Rasuwa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Rautahat	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Sarlahi	3	7	3	3	0	0	0	0	0	0	0	2	0	2	0	0	100%	43%	60%	60%	0%	0%	20%	20%	0%
Sindhuli	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0%		0%	100%	0%	0%	0%	0%	0%
Sindhupalchok	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Central Total	43	62	29	48	3	1	10	4	-	1	-	5	1	3	-	-	67%	77%	73%	77%	13%	1%	5%	4%	0%
Arghakhanchi	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Baglung	0	3	0	1	0	0	0	1	0	0	0	0	0	1	0	0		33%	33%	33%	33%	0%	0%	33%	0%
Gorkha	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Gulmi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Kapilbastu	1	5	0	4	0	0	1	1	0	0	0	0	0	0	0	0	0%	80%	67%	67%	33%	0%	0%	0%	0%
Kaski	2	4	1	3	0	0	0	0	0	1	1	0	0	0	0	0	50%	75%	67%	67%	0%	17%	17%	0%	0%
Lamjung	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mygadi	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Nawalparasi	0	8	0	4	0	0	0	1	0	2	0	0	0	1	0	0		50%	50%	50%	13%	25%	0%	13%	0%
Palpa	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Parbat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Rupandehi	5	9	3	6	0	0	1	2	0	1	0	0	0	0	1	0	60%	67%	64%	64%	21%	7%	0%	0%	7%
Syangja	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Tanahun	2	3	1	2	0	0	1	1	0	0	0	0	0	0	0	0	50%	67%	60%	60%	40%	0%	0%	0%	0%
Western Total	12	39	7	27	-	-	3	6	-	4	1	-	-	2	1	-	58%	69%	67%	67%	18%	8%	2%	4%	2%
Banke	5	6	2	2	0	0	2	1	0	2	0	1	1	0	0	0	40%	33%	36%	36%	27%	18%	9%	9%	0%
Bardiya	3	3	2	2	0	0	0	0	0	0	0	0	1	1	0	0	67%	67%	67%	67%	0%	0%	0%	33%	0%
Dailekh	1	4	0	3	0	0	1	1	0	0	0	0	0	0	0	0	0%	75%	60%	60%	40%	0%	0%	0%	0%
Dang	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Dolpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Humla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Jajarkot	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Jumla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Kalikot	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Failure																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Mugu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Pyuthan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Rolpa	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Rukum	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Salyan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Surkhet	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Mid-Westen Total	13	23	8	17	-	-	3	2	-	2	-	1	2	1	-	-	62%	74%	69%	69%	14%	6%	3%	8%	0%
Achham	2	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	50%	100%	67%	67%	33%	0%	0%	0%	0%
Baitadi	0	3	0	1	0	0	0	1	0	0	0	1	0	0	0	0		33%	33%	33%	33%	0%	33%	0%	0%
Bajhang	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Bajura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Dadeldhura	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Darchula	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Doti	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Kailali	5	15	2	10	0	0	1	1	1	1	0	2	1	1	0	0	40%	67%	60%	60%	10%	10%	10%	10%	0%
Kanchanpur	4	7	2	5	0	0	2	1	0	0	0	1	0	0	0	0	50%	71%	64%	64%	27%	0%	9%	0%	0%
Far-Western Total	13	30	7	21	-	-	4	3	1	1	-	4	1	1	-	-	54%	70%	65%	65%	16%	5%	9%	5%	0%
Grand Total	92	187	60	141	3	2	20	16	3	9	1	12	4	7	1	-	65%	75%	72%	74%	13%	4%	5%	4%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Retum After Defaulter																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Bhojpur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Dhankuta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Ilam	0	2	0	1	0	0	0	0	0	0	0	1	0	0	0	0		50%	50%	50%	0%	0%	50%	0%	0%
Jhapa	1	4	1	3	0	0	0	0	0	1	0	0	0	0	0	0	100%	75%	80%	80%	0%	20%	0%	0%	0%
Khotang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Morang	0	6	0	3	0	0	0	1	0	0	0	2	0	0	0	0		50%	50%	50%	17%	0%	33%	0%	0%
Okhaldhunga	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Panchthar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Sankhuwasabha	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0%	0%	0%	0%	0%	100%	0%	0%
Saptari	0	3	0	2	0	0	0	0	0	1	0	0	0	0	0	0		67%	67%	67%	0%	33%	0%	0%	0%
Siraha	1	2	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0%	0%	0%	67%	0%	0%	33%	0%	0%
Solukhumbu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Sunsari	1	12	1	7	0	0	0	0	0	1	0	4	0	0	0	0	100%	58%	62%	62%	0%	8%	31%	0%	0%
Taplejung	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Terhathum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Udayapur	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Eastern Total	3	33	2	19	1	1	-	1	-	3	-	9	-	-	-	-	67%	58%	58%	64%	3%	8%	25%	0%	0%
Bara	2	6	2	4	0	1	0	0	0	1	0	0	0	0	0	0	100%	67%	75%	88%	0%	13%	0%	0%	0%
Bhaktapur	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Chitawan	2	10	1	5	0	0	0	0	1	2	0	3	0	0	0	0	50%	50%	50%	50%	0%	25%	25%	0%	0%
Dhading	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Dhanusha	0	6	0	5	0	0	0	0	0	0	0	0	0	1	0	0		83%	83%	83%	0%	0%	0%	17%	0%
Dolkha	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Kathmandu	2	15	2	8	0	1	0	0	0	1	0	2	0	3	0	0	100%	53%	59%	65%	0%	6%	12%	18%	0%
Kavre	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0%	0%	0%	0%	0%	100%	0%	0%
Lalitpur	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Mahottari	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Makawanpur	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Nuwakot	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Parsa	3	8	3	7	0	0	0	1	0	0	0	0	0	0	0	0	100%	88%	91%	91%	9%	0%	0%	0%	0%
Ramechhap	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																									
District	Retum After Defaulter																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Rasuwa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Rautahat	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Sarlahi	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Sindhuli	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Sindhupalchok	0	3	0	2	0	0	0	0	0	1	0	0	0	0	0	0		67%	67%	67%	0%	33%	0%	0%	0%
Central Total	11	74	10	56	-	2	-	1	1	5	-	6	-	4	-	-	91%	76%	78%	80%	1%	7%	7%	5%	0%
Arghakhanchi	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0		0%	0%	0%	0%	100%	0%	0%	0%
Baglung	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Gorkha	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Gulmi	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Kapilbastu	1	4	1	4	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Kaski	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Lamjung	0	2	0	1	0	0	0	0	0	0	0	0	0	1	0	0		50%	50%	50%	0%	0%	0%	50%	0%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Mygadi	1	4	1	4	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Nawalparasi	0	5	0	2	0	0	0	1	0	0	0	2	0	0	0	0		40%	40%	40%	20%	0%	40%	0%	0%
Palpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Parbat	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Rupandehi	4	15	4	12	0	0	0	1	0	1	0	1	0	0	0	0	100%	80%	84%	84%	5%	5%	5%	0%	0%
Syangja	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Tanahun	0	4	0	3	0	0	0	0	0	0	0	1	0	0	0	0		75%	75%	75%	0%	0%	25%	0%	0%
Western Total	6	42	6	33	-	-	-	2	-	2	-	4	-	1	-	-	100%	79%	81%	81%	4%	4%	8%	2%	0%
Banke	2	15	2	8	0	0	0	1	0	3	0	3	0	0	0	0	100%	53%	59%	59%	6%	18%	18%	0%	0%
Bardiya	1	7	1	6	0	0	0	0	0	1	0	0	0	0	0	0	100%	86%	88%	88%	0%	13%	0%	0%	0%
Dailekh	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Dang	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Dolpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Humla	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0%	0%	0%	0%	0%	100%	0%	0%
Jajarkot	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0		0%	0%	0%	0%	0%	100%	0%	0%
Jumla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									

Treatment Outcome Report 2067-68(2010/11)																									
District	Retum After Defaulter																								
	Registered		Cured		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion								
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Cure			Success	Failure	Died	Default	T/O	N/D
																	F	M	Total						
Kalikot	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Mugu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Pyuthan	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0		100%	100%	100%	0%	0%	0%	0%	0%
Rolpa	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	100%		100%	100%	0%	0%	0%	0%	0%
Rukum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Salyan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Surkhet	0	4	0	3	0	0	0	1	0	0	0	0	0	0	0	0		75%	75%	75%	25%	0%	0%	0%	0%
Mid-Westen Total	5	34	5	23	-	-	-	2	-	4	-	5	-	-	-	-	100%	68%	72%	72%	5%	10%	13%	0%	0%
Achham	0	3	0	2	0	0	0	1	0	0	0	0	0	0	0	0		67%	67%	67%	33%	0%	0%	0%	0%
Baitadi	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Bajhang	1	4	1	3	0	1	0	0	0	0	0	0	0	0	0	0	100%	75%	80%	100%	0%	0%	0%	0%	0%
Bajura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Dadeldhura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Darchula	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Doti	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	100%	0%	0%	0%	0%	0%
Kailali	3	8	2	7	0	0	0	0	1	1	0	0	0	0	0	0	67%	88%	82%	82%	0%	18%	0%	0%	0%
Kanchanpur	0	6	0	5	0	0	0	0	0	1	0	0	0	0	0	0		83%	83%	83%	0%	17%	0%	0%	0%
Far-Western Total	8	25	7	21	-	1	-	1	1	2	-	-	-	-	-	-	88%	84%	85%	88%	3%	9%	0%	0%	0%
Grand Total	33	208	30	152	1	4	-	7	2	16	-	24	-	5	-	-	91%	73%	76%	78%	3%	7%	10%	2%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	New Smear Negative																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Bhojpur	1	6	1	6	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Dhankuta	5	8	5	8	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Ilam	8	24	7	23	0	0	1	1	0	0	0	0	0	0	88%	96%	94%	0%	6%	0%	0%	0%
Jhapa	115	227	106	217	0	1	4	8	0	0	4	1	1	0	92%	96%	94%	0%	4%	0%	1%	0%
Khotang	6	14	6	14	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Morang	97	202	87	177	0	0	2	14	6	9	2	2	0	0	90%	88%	88%	0%	5%	5%	1%	0%
Okhaldhunga	1	2	1	2	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Panchthar	11	10	9	8	0	0	0	0	0	0	1	0	1	2	82%	80%	81%	0%	0%	0%	5%	14%
Sankhuwasabha	6	12	6	12	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Saptari	143	271	141	262	0	0	2	8	0	0	0	0	0	1	99%	97%	97%	0%	2%	0%	0%	0%
Siraha	79	190	71	182	0	1	3	6	4	1	1	0	0	0	90%	96%	94%	0%	3%	2%	0%	0%
Solukhumbu	4	3	4	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Sunsari	74	144	66	126	0	0	2	9	3	3	1	3	2	3	89%	88%	88%	0%	5%	3%	2%	2%
Taplejung	4	7	4	5	0	0	0	1	0	1	0	0	0	0	100%	71%	82%	0%	9%	9%	0%	0%
Terhathum	2	6	2	6	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Udayapur	21	30	21	28	0	0	0	2	0	0	0	0	0	0	100%	93%	96%	0%	4%	0%	0%	0%
Eastern Total	577	1,156	537	1,079	-	2	14	49	13	14	9	6	4	6	93%	93%	93%	0%	4%	2%	1%	1%
Bara	166	281	105	179	50	88	5	2	3	10	2	0	1	2	63%	64%	64%	31%	2%	3%	0%	1%
Bhaktapur	29	41	26	37	0	0	0	2	0	0	3	1	0	1	90%	90%	90%	0%	3%	0%	6%	1%
Chitawan	103	186	94	166	2	1	2	6	0	3	5	6	0	4	91%	89%	90%	1%	3%	1%	4%	1%
Dhading	13	36	13	34	0	0	0	0	0	2	0	0	0	0	100%	94%	96%	0%	0%	4%	0%	0%
Dhanusha	130	290	118	265	0	0	6	10	6	11	0	3	0	1	91%	91%	91%	0%	4%	4%	1%	0%
Dolkha	5	23	5	17	0	0	0	3	0	1	0	2	0	0	100%	74%	79%	0%	11%	4%	7%	0%
Kathmandu	198	331	169	271	0	2	1	8	7	4	19	44	2	2	85%	82%	83%	0%	2%	2%	12%	1%
Kavre	19	44	18	41	0	0	1	3	0	0	0	0	0	0	95%	93%	94%	0%	6%	0%	0%	0%
Lalitpur	50	91	48	76	0	1	0	3	0	7	0	3	2	1	96%	84%	88%	1%	2%	5%	2%	2%
Mahottari	355	605	320	547	0	0	3	6	28	49	4	3	0	0	90%	90%	90%	0%	1%	8%	1%	0%
Makawanpur	82	105	79	101	0	0	3	1	0	1	0	2	0	0	96%	96%	96%	0%	2%	1%	1%	0%
Nuwakot	8	20	8	20	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Parsa	98	185	97	182	0	0	1	1	0	0	0	2	0	0	99%	98%	99%	0%	1%	0%	1%	0%
Ramechhap	8	17	8	17	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	New Smear Negative																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Rasuwa	0	2	0	2	0	0	0	0	0	0	0	0	0	0		100%	100%	0%	0%	0%	0%	0%
Rautahat	185	275	180	265	0	0	2	5	0	4	3	1	0	0	97%	96%	97%	0%	2%	1%	1%	0%
Sarlahi	211	344	204	332	0	0	2	4	3	7	2	1	0	0	97%	97%	97%	0%	1%	2%	1%	0%
Sindhuli	29	73	26	71	0	0	3	0	0	2	0	0	0	0	90%	97%	95%	0%	3%	2%	0%	0%
Sindhupalchok	17	36	15	33	0	0	2	2	0	1	0	0	0	0	88%	92%	91%	0%	8%	2%	0%	0%
Central Total	1,706	2,985	1,533	2,656	52	92	31	56	47	102	38	68	5	11	90%	89%	89%	3%	2%	3%	2%	0%
Arghakhanchi	16	42	15	41	0	0	0	1	0	0	0	0	1	0	94%	98%	97%	0%	2%	0%	0%	2%
Baglung	14	25	12	20	0	1	2	3	0	1	0	0	0	0	86%	80%	82%	3%	13%	3%	0%	0%
Gorkha	7	22	7	18	0	1	0	3	0	0	0	0	0	0	100%	82%	86%	3%	10%	0%	0%	0%
Gulmi	12	44	11	40	0	0	0	3	0	0	0	1	1	0	92%	91%	91%	0%	5%	0%	2%	2%
Kapilbastu	36	111	30	100	1	0	3	4	2	7	0	0	0	0	83%	90%	88%	1%	5%	6%	0%	0%
Kaski	26	51	22	46	0	1	2	1	0	1	0	1	2	1	85%	90%	88%	1%	4%	1%	1%	4%
Lamjung	12	25	11	23	0	0	1	1	0	0	0	1	0	0	92%	92%	92%	0%	5%	0%	3%	0%
Manang	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Mustang	2	1	2	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Mygadi	2	4	2	4	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Nawalparasi	93	171	93	154	0	0	0	7	0	1	0	5	0	4	100%	90%	94%	0%	3%	0%	2%	2%
Palpa	35	61	30	53	0	0	3	6	1	0	1	0	0	2	86%	87%	86%	0%	9%	1%	1%	2%
Parbat	2	11	2	9	0	0	0	0	0	2	0	0	0	0	100%	82%	85%	0%	0%	15%	0%	0%
Rupandehi	110	191	105	174	0	1	5	6	0	4	0	4	0	2	95%	91%	93%	0%	4%	1%	1%	1%
Syangja	25	43	21	40	1	0	1	2	1	1	1	0	0	0	84%	93%	90%	1%	4%	3%	1%	0%
Tanahun	19	42	18	38	0	0	1	2	0	0	0	0	0	2	95%	90%	92%	0%	5%	0%	0%	3%
Western Total	411	844	381	761	2	4	18	39	4	17	2	12	4	11	93%	90%	91%	0%	5%	2%	1%	1%
Banke	131	179	129	165	0	1	1	4	0	3	1	6	0	0	98%	92%	95%	0%	2%	1%	2%	0%
Bardiya	55	72	51	61	0	0	2	7	2	0	0	4	0	0	93%	85%	88%	0%	7%	2%	3%	0%
Dailekh	4	33	4	32	0	0	0	1	0	0	0	0	0	0	100%	97%	97%	0%	3%	0%	0%	0%
Dang	121	191	112	174	0	0	3	11	4	4	1	2	1	0	93%	91%	92%	0%	4%	3%	1%	0%
Dolpa	0	1	0	1	0	0	0	0	0	0	0	0	0	0		100%	100%	0%	0%	0%	0%	0%
Humla	4	3	3	3	0	0	1	0	0	0	0	0	0	0	75%	100%	86%	0%	14%	0%	0%	0%
Jajarkot	20	33	20	31	0	0	0	1	0	1	0	0	0	0	100%	94%	96%	0%	2%	2%	0%	0%
Jumla	4	14	3	10	0	0	0	3	0	0	1	1	0	0	75%	71%	72%	0%	17%	0%	11%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	New Smear Negative																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Kalikot	12	7	12	7	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Mugu	1	1	1	1	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Pyuthan	19	38	17	34	0	0	2	3	0	1	0	0	0	0	89%	89%	89%	0%	9%	2%	0%	0%
Rolpa	15	35	14	33	0	0	0	1	1	1	0	0	0	0	93%	94%	94%	0%	2%	4%	0%	0%
Rukum	27	33	26	30	0	0	0	1	0	0	1	1	0	1	96%	91%	93%	0%	2%	0%	3%	2%
Salyan	22	65	20	56	0	0	2	5	0	3	0	1	0	0	91%	86%	87%	0%	8%	3%	1%	0%
Surkhet	55	100	51	87	0	1	1	5	2	3	1	4	0	0	93%	87%	89%	1%	4%	3%	3%	0%
Mid-Westen Total	490	805	463	725	-	2	12	42	9	16	5	19	1	1	94%	90%	92%	0%	4%	2%	2%	0%
Achham	7	21	7	20	0	0	0	1	0	0	0	0	0	0	100%	95%	96%	0%	4%	0%	0%	0%
Baitadi	15	26	15	24	0	0	0	1	0	0	0	0	0	1	100%	92%	95%	0%	2%	0%	0%	2%
Bajhang	2	19	2	18	0	0	0	1	0	0	0	0	0	0	100%	95%	95%	0%	5%	0%	0%	0%
Bajura	1	6	1	6	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Dadeldhura	8	39	6	37	0	0	1	2	1	0	0	0	0	0	75%	95%	91%	0%	6%	2%	0%	0%
Darchula	12	13	12	13	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Doti	17	26	15	22	0	0	2	4	0	0	0	0	0	0	88%	85%	86%	0%	14%	0%	0%	0%
Kailali	84	185	79	175	0	0	4	3	1	5	0	2	0	0	94%	95%	94%	0%	3%	2%	1%	0%
Kanchanpur	72	135	67	126	0	1	1	3	3	3	1	1	0	1	93%	93%	93%	0%	2%	3%	1%	0%
Far-Western Total	218	470	204	441	-	1	8	15	5	8	1	3	-	2	94%	94%	94%	0%	3%	2%	1%	0%
Grand Total	3,402	6,260	3,118	5,662	54	101	83	201	78	157	55	108	14	31	92%	90%	91%	2%	3%	2%	2%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	Extra pulmonary																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Bhojpur	18	17	18	17	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Dhankuta	17	23	17	22	0	0	0	1	0	0	0	0	0	0	100%	96%	98%	0%	3%	0%	0%	0%
Ilam	16	18	15	17	0	0	0	0	0	0	0	1	1	0	94%	94%	94%	0%	0%	0%	3%	3%
Jhapa	127	132	120	125	0	1	3	1	1	0	1	5	2	0	94%	95%	95%	0%	2%	0%	2%	1%
Khotang	4	16	4	16	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Morang	204	209	185	196	0	1	5	5	5	3	8	4	1	0	91%	94%	92%	0%	2%	2%	3%	0%
Okhaldhunga	8	10	8	10	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Panchthar	12	11	11	11	0	0	0	0	0	0	1	0	0	0	92%	100%	96%	0%	0%	0%	4%	0%
Sankhuwasabha	12	11	12	11	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Saptari	31	50	31	48	0	0	0	2	0	0	0	0	0	0	100%	96%	98%	0%	2%	0%	0%	0%
Siraha	23	47	21	45	0	0	0	0	1	2	1	0	0	0	91%	96%	94%	0%	0%	4%	1%	0%
Solukhumbu	6	3	6	3	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Sunsari	165	154	150	133	0	0	4	5	1	6	5	5	5	5	91%	86%	89%	0%	3%	2%	3%	3%
Taplejung	4	11	4	10	0	0	0	1	0	0	0	0	0	0	100%	91%	93%	0%	7%	0%	0%	0%
Terhathum	7	10	7	10	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Udayapur	23	36	22	36	0	0	0	0	1	0	0	0	0	0	96%	100%	98%	0%	0%	2%	0%	0%
Eastern Total	677	758	631	710	-	2	12	15	9	11	16	15	9	5	93%	94%	93%	0%	2%	1%	2%	1%
Bara	38	51	30	38	7	9	0	2	1	2	0	0	0	0	79%	75%	76%	18%	2%	3%	0%	0%
Bhaktapur	102	102	99	95	0	0	0	2	0	1	3	3	0	1	97%	93%	95%	0%	1%	0%	3%	0%
Chitawan	97	130	88	116	1	0	1	0	1	2	3	8	3	4	91%	89%	90%	0%	0%	1%	5%	3%
Dhading	35	41	35	41	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Dhanusha	26	59	24	55	0	0	0	1	2	2	0	1	0	0	92%	93%	93%	0%	1%	5%	1%	0%
Dolkha	22	38	19	34	0	0	1	0	2	2	0	1	0	1	86%	89%	88%	0%	2%	7%	2%	2%
Kathmandu	622	699	539	580	4	3	6	10	7	12	60	83	6	11	87%	83%	85%	1%	1%	1%	11%	1%
Kavre	45	70	42	69	0	0	2	1	0	0	1	0	0	0	93%	99%	97%	0%	3%	0%	1%	0%
Lalitpur	143	134	134	126	0	0	5	2	0	0	3	5	1	1	94%	94%	94%	0%	3%	0%	3%	1%
Mahottari	25	38	24	37	0	0	0	0	1	1	0	0	0	0	96%	97%	97%	0%	0%	3%	0%	0%
Makawanpur	43	62	42	59	0	0	1	2	0	0	0	1	0	0	98%	95%	96%	0%	3%	0%	1%	0%
Nuwakot	21	31	21	31	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Parsa	60	83	59	81	0	0	0	0	1	0	0	2	0	0	98%	98%	98%	0%	0%	1%	1%	0%
Ramechhap	19	43	19	43	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	Extra pulmonary																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Rasuwa	5	9	5	9	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Rautahat	43	67	41	64	0	0	2	2	0	0	0	1	0	0	95%	96%	95%	0%	4%	0%	1%	0%
Sarlahi	44	56	43	55	0	0	0	1	1	0	0	0	0	0	98%	98%	98%	0%	1%	1%	0%	0%
Sindhuli	26	23	23	23	0	0	1	0	2	0	0	0	0	0	88%	100%	94%	0%	2%	4%	0%	0%
Sindhupalchok	31	48	28	43	0	0	1	0	2	5	0	0	0	0	90%	90%	90%	0%	1%	9%	0%	0%
Central Total	1,447	1,784	1,315	1,599	12	12	20	23	20	27	70	105	10	18	91%	90%	90%	1%	1%	1%	5%	1%
Arghakhanchi	26	54	25	50	1	0	0	2	0	2	0	0	0	0	96%	93%	94%	1%	3%	3%	0%	0%
Baglung	18	28	18	22	0	0	0	5	0	1	0	0	0	0	100%	79%	87%	0%	11%	2%	0%	0%
Gorkha	33	41	30	38	0	0	1	2	2	0	0	1	0	0	91%	93%	92%	0%	4%	3%	1%	0%
Gulmi	40	47	35	44	0	0	3	1	0	0	0	1	2	1	88%	94%	91%	0%	5%	0%	1%	3%
Kapilbastu	37	66	34	58	0	0	1	1	2	6	0	1	0	0	92%	88%	89%	0%	2%	8%	1%	0%
Kaski	64	74	60	66	0	0	2	4	1	3	1	1	0	0	94%	89%	91%	0%	4%	3%	1%	0%
Lamjung	11	20	11	18	0	0	0	2	0	0	0	0	0	0	100%	90%	94%	0%	6%	0%	0%	0%
Manang	2	0	1	0	0	0	0	0	0	0	0	0	1	0	50%		50%	0%	0%	0%	0%	50%
Mustang	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Mygadi	11	14	10	13	0	0	1	0	0	1	0	0	0	0	91%	93%	92%	0%	4%	4%	0%	0%
Nawalparasi	79	115	76	106	0	2	2	2	1	1	0	3	0	1	96%	92%	94%	1%	2%	1%	2%	1%
Palpa	52	61	49	54	0	0	2	2	0	0	0	3	1	2	94%	89%	91%	0%	4%	0%	3%	3%
Parbat	11	14	10	14	0	0	0	0	1	0	0	0	0	0	91%	100%	96%	0%	0%	4%	0%	0%
Rupandehi	112	134	105	129	0	0	1	3	0	1	2	0	4	1	94%	96%	95%	0%	2%	0%	1%	2%
Syangja	35	56	33	49	0	0	0	5	2	2	0	0	0	0	94%	88%	90%	0%	5%	4%	0%	0%
Tanahun	26	34	24	31	1	1	1	2	0	0	0	0	0	0	92%	91%	92%	3%	5%	0%	0%	0%
Western Total	557	758	521	692	2	3	14	31	9	17	3	10	8	5	94%	91%	92%	0%	3%	2%	1%	1%
Banke	60	64	57	60	0	0	1	1	0	1	2	2	0	0	95%	94%	94%	0%	2%	1%	3%	0%
Bardiya	46	58	43	55	0	0	1	1	0	0	1	2	1	0	93%	95%	94%	0%	2%	0%	3%	1%
Dailekh	18	18	18	17	0	0	0	1	0	0	0	0	0	0	100%	94%	97%	0%	3%	0%	0%	0%
Dang	70	103	66	92	0	0	0	4	3	4	0	2	1	1	94%	89%	91%	0%	2%	4%	1%	1%
Dolpa	2	1	2	0	0	0	0	0	0	0	0	1	0	0	100%	0%	67%	0%	0%	0%	33%	0%
Humla	2	0	2	0	0	0	0	0	0	0	0	0	0	0	100%		100%	0%	0%	0%	0%	0%
Jajarkot	15	17	14	17	0	0	0	0	1	0	0	0	0	0	93%	100%	97%	0%	0%	3%	0%	0%
Jumla	6	12	5	11	0	0	0	0	0	0	0	1	1	0	83%	92%	89%	0%	0%	0%	6%	6%
Kalikot	12	16	12	16	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%

Treatment Outcome Report 2067-68(2010/11)																						
District	Extra pulmonary																					
	Registered		Completed		Failure		Died		Defaulted		Transferred out		No result		Proportion							
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	Completion Rate			Failure	Died	Default	T/O	N/D
															F	M	Total					
Mugu	7	4	7	4	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Pyuthan	25	18	24	18	0	0	1	0	0	0	0	0	0	0	96%	100%	98%	0%	2%	0%	0%	0%
Rolpa	43	55	38	50	0	0	4	4	1	1	0	0	0	0	88%	91%	90%	0%	8%	2%	0%	0%
Rukum	32	29	31	28	0	0	0	0	0	0	1	1	0	0	97%	97%	97%	0%	0%	0%	3%	0%
Salyan	24	28	22	27	1	0	0	1	0	0	1	0	0	0	92%	96%	94%	2%	2%	0%	2%	0%
Surkhet	110	122	101	112	0	0	5	3	1	2	3	5	0	0	92%	92%	92%	0%	3%	1%	3%	0%
Mid-Westen Total	472	545	442	507	1	-	12	15	6	8	8	14	3	1	94%	93%	93%	0%	3%	1%	2%	0%
Achham	15	13	15	13	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Baitadi	12	27	10	23	1	0	0	2	0	0	0	1	1	1	83%	85%	85%	3%	5%	0%	3%	5%
Bajhang	12	18	12	18	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Bajura	14	12	14	12	0	0	0	0	0	0	0	0	0	0	100%	100%	100%	0%	0%	0%	0%	0%
Dadeldhura	9	21	9	19	0	0	0	2	0	0	0	0	0	0	100%	90%	93%	0%	7%	0%	0%	0%
Darchula	7	18	6	16	0	0	0	0	0	0	0	0	1	2	86%	89%	88%	0%	0%	0%	0%	12%
Doti	8	13	8	11	0	0	0	1	0	1	0	0	0	0	100%	85%	90%	0%	5%	5%	0%	0%
Kailali	68	93	62	82	0	1	5	3	1	4	0	3	0	0	91%	88%	89%	1%	5%	3%	2%	0%
Kanchanpur	64	62	60	61	1	0	0	1	1	0	1	0	1	0	94%	98%	96%	1%	1%	1%	1%	1%
Far-Western Total	209	277	196	255	2	1	5	9	2	5	1	4	3	3	94%	92%	93%	1%	3%	1%	1%	1%
Grand Total	3,362	4,122	3,105	3,763	17	18	63	93	46	68	98	148	33	32	92%	91%	92%	0%	2%	2%	3%	1%

National Tuberculosis Centre
Thimi, Bhaktapur
Tel. : 00977-1-6630033, 6630706
Fax : 00977-1-6635986
E-mail : ntpdirector@mail.com.np
Web : www.nepalntp.gov.np