

Performance Framework Years 3,4&5: Indicators, Targets, and Periods Covered
(formerly Attachment A)

TB

Country:	Bhutan
Disease:	TB
Grant number:	BTN-607-GO4-T
Principal Recipient:	Ministry of Health, Royal Government of Bhutan

A. Periods covered and dates for disbursement requests and progress updates

	Period 9	Period 10	Period 11	Period 12	Period 13	Period 14	Period 15	Period 16	Period 17	Period 18	Period 19	Period 20
Period Covered: from	1-Jan-10	1-Apr-10	1-Jul-10	1-Oct-10	1-Jan-11	1-Apr-11	1-Jul-11	1-Oct-11	1-Jan-12	1-Apr-12	1-Jul-12	1-Oct-12
Period Covered: to	31-Mar-10	30-Jun-10	30-Sep-10	31-Dec-10	31-Mar-11	30-Jun-11	30-Sep-11	31-Dec-11	31-Mar-12	30-Jun-12	30-Sep-12	31-Dec-12
Date Progress Update due (typically 45 days after end of period)	15-May-10	14-Aug-10	14-Nov-10	14-Feb-11	15-May-11	14-Aug-11	14-Nov-11	14-Feb-12	15-May-12	14-Aug-12	14-Nov-12	14-Feb-13
Disbursement Request ? (Y,N)	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N

Audit Report Due Date:	31-Dec-11	31-Dec-12	31-Dec-13
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B. Program Goal, impact and outcome indicators

Goals:	To increase case detection and provide services among special population and patient groups
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Impact / outcome indicator	Indicator	Baseline			Targets					Comments*	
		value	Year	Source	Year 1	Year 2	Year 3	Year 4	Year 5		
Impact	TB prevalence rate (all forms) - Estimated number of all active TB cases per 100,000 population per year	122/100,000	2007	WHO regional workshop/ estimation 2009	-3% over the baseline	-5% over the baseline	-6% over the baseline	-8% over the baseline	-10% over the baseline		Targets have been updated according to latest WHO estimations (2009 data). This will be further validated by the ARTI survey at the end of 2009.
Impact	TB mortality rate- Estimated number of deaths due to TB	18/100,000	2007	WHO regional workshop/ estimation 2009	N/A	-11% over the baseline	-16% over the baseline	-22% over the baseline	-26% over the baseline		Targets have been updated according to latest WHO estimations (2008 data).
Outcome	Case detection rate (new smear positive) - Percentage of new smear positive TB cases detected among the new smear positive TB cases estimated to occur countrywide each year	74.7%	2006	NTCP Report 2006	371/475.5 (78%)	381/475.5 (80%)	425/531 (80%)	431/526 (82%)	434/511 (85%)		Numerical targets for years 3-5 have been updated according to latest WHO estimations (2008 data). Targets for treatment success rate are for the cohort that started treatment in the previous year.
Outcome	Treatment success rate (new smear positive - Percentage of new smear positive TB cases that successfully complete their treatment (treatment completed plus cured) among the new smear positive TB cases registered during a specified period	83%	2005 Cohort	NTCP Report 2006	307/348 (88.22%)	331/371 (89.22%)	90%	91%	92%		Numerical targets for years 3-5 have been updated according to latest WHO estimations (2008 data). Targets for treatment success rate are for the cohort that started treatment in the previous year.

* please specify source of measurement for indicator in case different to baseline source

C. Program Objectives, Service Delivery Areas and Indicators

Objective Number	Objective description
1	To detect at least 80% of the estimated new smear positive cases
2	To cure at least 90% of the diagnosed new smear positive cases
3	By 2015, to have halted and begun to reverse the TB incidence in Bhutan

Objective / Indicator Number	Service Delivery Area	Indicator	Baseline (if applicable)			Phase 1		Periodical targets for year 3 - 5												Directly tied (Y/N)	Baselines included in targets (Y/N)	Targets cumulative (Y - over program term / Y - cumulative annually / N not cumulative)	Comments
			Value	Year	Source	Targets (P8)	latest available results (P8)	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20				
1.1	High Quality DOTS	Number of new smear positive TB cases detected among the new cases estimated to occur countrywide each year	74.70%	2006	NTCP report 2006	190	468	95	170	270	381 (80% of 475)	81	174	283	390 (82% of 475)	84	180	283	404 (85% of 475)	N	N	Y - cumulative annually	Targets are cumulated by calendar year (Jan-Dec). The estimated new smear positive cases per year in Bhutan is 475 based on the ARTI of 1.5, i.e. 75 cases per 100,000. ARTI survey was conducted in 1991 and 2009. The result from the 2009 survey is due in April 2010. Year 4 & 5 target will be revised based on the updated ARTI. Population of Bhutan= 634,982 (Population and Housing Census of Bhutan 2005).
1.2	High Quality DOTS	Number of new smear positive TB cases that successfully completed their treatment (treatment completed plus cured) among the new smear positive TB cases registered on treatment in the previous year.	83%	2005 Cohort	NTCP report 2006	165 90% of 184 (Q5 of R6)	93/104 (89%)	92	202	307	421/468 (90%)	86	154	246	347/381 (91%)	75	160	260	359/390 (92%)	N	Y	Y - cumulative annually	Targets are cumulated by calendar year (Jan-Dec). The year 3 target is based on actual cases registered under DOTS in year 2009. The year 4 and 5 targets are based on the estimated cases enrolled in 2010 and 2011 under indicator 1.1, taking into account a 12-months delay in reporting.
1.3	High Quality DOTS	Number of Monastery DOTS providers trained	N/A	N/A	N/A	90	198	198	198	218	218	238	238	238	238	258	258	258	258	Y	N	Y - over program term	

1.4	High-risk groups	Number of migrants (expatriate workers) screened for TB at the three border entry points (using X-rays)	N/A	N/A	N/A	57'000	86'116	93'000	93'000	97'000	104'000	110'000	117'000	124'000	132'000	138'000	145'000	152'000	160'000	Y	N	Y - over program term	The number of migrant workers screened has increased from the original targets mentioned in the proposal because of increase in construction works (expansion of national highway and several hydro power projects). In Phase 1 the target was achieved with the existing facilities. In Phase 2, additional X-Ray machines will be procured, which will increase the screening. Screening of migrant laborers is the government policy in Bhutan. The migrants are mostly the construction laborers from India who are being screened for TB before entering the country. The employers usually pay for the tests. If the workers are found TB positive at the border, they are referred for treatment to cross referral Indian DOTS centers. The migrant laborers who develop TB while in Bhutan are put on treatment as per the Bhutanese treatment regimen (6 months) and the treatment is provided free of charge. The target for P9 was changed retrospectively (after the P9 extension was agreed) in light of the results achieved at P8.
1.5	High-risk groups	Number of transport workers reached through advocacy/tailor made TB messages	0	2009	Activity reports	N/A	N/A	0	500	750	1'000	1'250	1'500	1'750	2'000	2'250	2'500	2'750	3'000	Y	N	Y - over program term	The truck drivers will be reached at the boarder areas. The taxi drivers will be reached through taxi drivers association.
1.6	MDR-TB	Number of people enrolled on MDR-TB treatment (2nd line drugs)	15 per year	2006	NTCP report	30	19	0	5	10	15	5	10	15	20	5	10	15	20	Y	N	Y - cumulative annually	Targets are cumulated by calendar year (Jan-Dec). As of Dec 2009, 19 MDR patients have been enrolled for treatment through government funding (2008-2009). GLC approved enrollment of initial cohort of 50 patients in June 2009 (patients will be enrolled in Phase 2). Those 19 MDR-TB patients who were put on treatment in Phase 1 will be continuing the existing regimen. All new MDR-TB cases will be enrolled on new regimen supported through the GF/GLC.
1.7	MDR-TB	Number of lab-confirmed MDR TB patients successfully treated among those enrolled in second line anti TB treatment	83% treatment success rate	2006-2007 cohort	NTCP Report	n/a	n/a	2	2	4	5	2	2	4	6	3	5	6	8	N	N	Y - cumulative annually	Targets are cumulated by calendar year (Jan-Dec). Number of patients successfully treated are reported with a 36 months delay. These numbers refer to those patients put on treatment supported by government funds in 2007-2009. The treatment success of those 50 patients put on GLC treatment under Phase 2 will not be reported under Phase 2 due to the delay in reporting.
1.8	MDR-TB	Number and percentage of laboratory confirmed MDR-TB patients still receiving treatment among those enrolled in second line anti-TB treatment during a specified time period	n/a	n/a	n/a	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	Y	N	Y - cumulative annually	Reporting of patients still on treatment 6 months after enrollment will be with a 12 months delay (as with DOTS cohort) and is reported cumulative annually (per calendar year). PR will provide targets at the beginning of year 4, based on experience with implementation in year 3.
1.9	ACSM (Advocacy, communication and social mobilization)	Number of radio/TV programmes about TB disease, its transmission, diagnosis and treatment broadcasted/aired	131	2006	NTCP report	261	293	28	28	28	28	28	28	28	28	28	28	28	28	Y	N	N - not cumulative	Indicator was previously reported cumulatively over quarters (but not over years). As per Bhutan Living Standard Survey (2007), there are 125,000 households in Bhutan. The average household size is 5. The Survey shows that there are 37.7 percent of the households own TV and 62 percent own Radio. Therefore, we expect to reach to 235,625 people (37.7 % of 125,000 X 5) through TV and to about 387,500 people (62 % of 125,000 X 5) through Radio. The frequency of airing is every quarter and that is 14 times radio and 14 times TV for each quarter.
2.1	Improving diagnosis	Laboratories showing adequate performance of QA (more than 90%) for smear microscopy slide re-checking results	30	2009 (P6 of phase 1 of R6)	NTP	N/A	N/A	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	30 (100%)	N	Y	N - not cumulative	All positive slides and 20 % of negatives are re-checked by the Public Health Laboratory. This QA activity was supported by R-4 and will be continued through R-6. Since there are only 30 hospitals in the country, the QA program will ensure that all the labs submit slides for rechecking and should have the results of more than 90%.
2.2	HSS: Health Workforce	Number of lab technicians trained	37	2006	NTP Round 4 Report	NA	NA	0	41	41	41	81	81	81	81	121	121	121	121	Y	N	Y - over program term	In phase 2, a total of 121 lab technicians will be trained. Out of 121, the number for new lab technicians trained will be 45. 70 will be refresher training and 6 attachment training. The number of new lab technicians trained will be 45 because RHHS has the capacity to produce only 15 lab technicians per year.
2.3	M&E	Number of health facilities (BHUs and hospitals) submitting timely reports according to national guidelines	30	2009 (P6 of phase 1 of R6)	NTP	30	30	30	30	30	30	30	30	30	30	30	30	30	30	N	N	N - not cumulative	The report from total of 30 reporting centers will be submitted quarterly according to national guidelines.
2.4	M&E	Number of reporting units (BHU and hospitals) with functioning electronic TB registers	0	2008	Activity reports	30	0	30	30	30	30	30	30	30	30	30	30	30	30	Y	N	Y - over program term	Upon the establishment of TB electronic reporting systems, it will be introduced in the reporting centers in phases. Once all the reporting centers have functional TB electronic registers, the manual system will be phased out. 'Functional' also implies that district data entry operators and statisticians will have been trained on the electronic TB register (66 in total).