

Sierra Leone

FY2013

Control of Neglected Tropical Diseases

Annual Work Plan October 2012 – September 2013

Submitted to: FHI360

Submitted by: Helen Keller International – Sierra Leone

For further information, please contact:

Chad Mac Arthur Director of Neglected Tropical Disease Control

Helen Keller International 352 Park Avenue South New York City, NY 10010 USA





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ACRONYMS AND ABBREVIATIONS

ALB	Albendazole
APOC	African Program for Onchocerciasis Control
CHV	Community Health Volunteer
CDD	Community Directed Distributor
CHW	Community Health Worker
CDTI	Community Directed Treatment with Ivermectin
CIDA	Canadian International Development
CMS	Center Medical Store
GOSL	Government of Sierra Leone
FAQs	Frequently Asked Questions
FOG	Fixed Obligation Grant
FY	Fiscal Year
FP	Focal Person
HDs	Health Districts
HTR	Hard to reach locations
LF	Lymphatic filariasis
DHMT	District Health Management Team
HO	Head Office
IRS	Indoor residual spraying
IVM	Ivermectin
JSI	John Snow Incorporated
LLITN	Long Lasting Insecticide Treated Net
MDA	Mass Drug Administration
MEST	Ministry of Education, Science and Technology
M&E	Monitoring and Evaluation
MCHW	Mother and Child Health Week
MOHS	Ministry of Health and Sanitation
MRU	Mano River Union
NEC/ADR	National Expert Committee for Adverse Drug Reactions
, NSAHP	National School and Adolescence Health Program
NTD	Neglected Tropical Diseases
NTDCP	NTD Control Program
NTDFP	NTD Focal Point
NMCP	National Malaria Control Program
Oncho	Onchocerciasis
PZQ	Praziquantel
RTI	Research Triangle Institute
SAC	School Aged Children
SAE	Serious Adverse Event
SCH	Schistosomiasis
SCM	Supply Chain Management

SH	School Health
SLPB	Sierra Leone Pharmacy Board
STH	Soil Transmitted Helminthes
ТА	Technical Assistance
TIPAC	Tool for Integrated Planning and Costing
USAID	United States Agency for International Development
WA	Western Area (Rural and urban WA)
VAS	Vitamin A Supplementation
WASH	Water and Sanitation and Hygiene
WHO	World Health Organization

Executive Summary

The goal for fiscal year (FY) 13 is to maintain effective MDA coverage for Lymphatic filariasis (LF), soil transmitted helminthes (STH), onchocerciasis (Oncho), and schistosomiasis (SCH) in all areas of Sierra Leone that are endemic for each disease (14 health districts (HDs) for LF and STH, 12 HDs for Oncho, 64 chiefdoms in 7 HDs for Schisto).

MDA refresher training sessions will be conducted for supervisors, district health management team (DHMT) members, peripheral health unit (PHU) staff, community drugs distributors (CDDs) and community health volunteers (CHVs)/ community health worker (CHWs) to ensure that MDA is appropriately performed for approximately 5.8 million individuals for LF and STH, 2.6 million for Oncho, and 1.9 million people for schistosomiasis.

CDDs/CHVs/CHWs will be supportively supervised during MDA at all levels: national, district and community. Staff of the NTDCP, HKI, DHMTs and community leaders will supervise the MDA at community levels, identify constraints and challenges, and initiate remedial action to ensure effective coverage is achieved.

A set of monitoring and evaluation (M&E) tools, which include questionnaires, will be administered to community leaders, CDDs, DHMTs and community members to assess the extent and quality of activities performed. The data derived from M&E deliverables are cross checked and feedback to the DHMTs at the annual review meeting and will also be reported in semi-annual reports. All data on training and MDA are disaggregated by gender for all target NTDs. In addition to the routine M&E, an independent monitoring tool, which provides real-time performance indicators during MDA termed 'in-process monitoring' is utilized to help the DHMTs overcome problems with supplies, refusals, distribution or other issues. The 'end-process monitoring' will be used to obtain final MDA coverage figures to augment the NTDCP report, especially in hard-to-reach locations (HTR) and in urban settings such as the WA, where accurate population data is unavailable.

Following the recommendations from the supply chain management (SCM) assessment conducted in February 2012 by the END in Africa partner in charge of supply chain, John Snow Inc. (JSI), the neglected tropical disease control program (NTDCP) has requested technical assistance (TA) to help strengthen the program on SCM of NTD drugs and improve standard operating procedures, and how SCM of neglected tropical disease (NTD) drugs could be integrated into the existing system.

Another FY13 goal is to develop a strategic plan for the elimination of LF in 12 HDs. A national advocacy meeting, held annually to sustain the commitment of the MOHS and other stakeholders to NTD control in Sierra Leone, will be held in the first quarter of FY13 to ensure continued commitment from partners and stakeholders, support of human resource development and integration of activities to control/eliminate all NTDs into the primary healthcare system and national health curricula for FY13 and beyond. Post-elimination strategies are underway and impact assessments completed for all NTDs show a reduction in

disease prevalence in most sentinel sites examined, indicating progress towards control/elimination. This data has been captured in the program workbook. In a bid to meet elimination targets, plans to limit cross-border transmission have been proposed and DHMTs in districts bordering neighboring countries will hold regular cross border meetings with village or community leaders on both sides of the border. The NTDCP and their NGO partners will continue to be part of the MRU efforts to control cross border recrudescence of diseases, an essential component of the post-elimination strategy. As the NTDCP moves towards LF elimination, more emphasis will be put on strengthening the M&E in all areas of program implementation. Efforts are currently being made to include LF surveillance in the MOHS surveillance system. The surveillance data that will be collected include: the prevalence (the number of people carrying the microfilaria of the Wuchereria bancrofti worm, the microfilaria density (a measure of how heavy the infection is in a given community in terms of the number of mf detected on each positive slide), the community microfilaria load (measure of how heavy the infection is in a sentinel site), and the number of hydrocele and Lymphoedema cases in sentinel sites. These indicators will be included during the surveillance annual review meeting, organised by the Directorate of Disease Prevention and Control of the MOHS.

BACKGROUND

Disease		# non- endemic districts (current)	# districts needing mapping	# distric ongoing		# districts needing MDA, but not	where
				USAID funded	Others	started	stopped
Schistosomiasis	7	7	0	7	0	0	0
STH	14	0	0	14	0	0	0
LF	14	0	0	14	0	0	0
Oncho	12	2	0	12	0	0	0
Trachoma	0	0	0	0	0	0	0

Table 1: NTD program in *Sierra Leone*

Summary of the different activities and the key results accomplished during the last year.

Current status of the National NTD program

In FY 12, the sixth effective round of MDA Oncho was conducted in the 12 HDs, treating 2,446,658 persons and reaching an epidemiologic coverage over 80%. The fifth effective round of MDA LF-STH was conducted in the 12 HDs treating 3,908,524 persons, and reaching an epidemiologic coverage over 80%. Midterm assessment conducted in all districts suggests that STH is no longer a public health problem in Sierra Leone. Refresher training of 21,500 CDDs and training of 500 new CDDs was held prior to MDA in the 12 HDs. The new trainees were selected by the communities to replace those CDDs who have migrated to other towns. Following the training, village census data was updated in the village register by the CDDs, verified by PHU staff, collated by the NTD focal point person by chiefdom, and forwarded to the NTDCP. During MDA, supportive supervision ensured that the MDA was correctly carried out by national, district and PHU staff. In addition to supportive supervision, independent monitors from the Sierra Leone Pharmacy Board (SLPB), Statistics Sierra Leone (SSL), Njala University (NU) and HKI were trained and monitored the MDA in 12 HDs (both the headquarter towns and a random sample of the rural areas). A midterm impact assessment was conducted in seven districts endemic for schistosomiasis after three effective rounds of MDA. The results of the assessment showed a reduction of SCH prevalence by 66.3% and SCH intensity by 51.7%. The result of this assessment has also been included in program workbook.

Other partners involved in prior year's activities and the key results.

The first advocacy meeting, which aimed to include NTDs in the curricula of all health institutions, was conducted with the participation of heads of department, academic staff and

students of the School of Community Health and Science, at Njala University in Bo. The lecturers and students lauded the idea of NTDs being included in the school curricula and pledged their support and commitment to the process. An annual review of all NTD activities was conducted in the Southern region of Bo with the participation of the Chief Medical Officer of the MOHS, DMOs, NTD and school health (SH) focal persons and NGO partners. The NTD focal persons (FPs) of each DHMT presented the results of the previous year's NTD activities, following which discussions were held. The lessons learnt and recommendations from the annual review meeting will be implemented during the next phases of program implementation.

Goals for the year 2012-2013

The goal for FY13 is to maintain effective MDA in 14 HDs for LF and STH, in 12 HDs for onchocerciasis and in 7 HDs for moderately or highly endemic chiefdoms for SCH. A second round of MDA-STH will be implemented with additional funding from the World Bank Fast Track Initiative (FTI) through MEST, with drug donations targeting school aged children in 12 health districts.

MAIN ACTIVITIES

Support NTD Country Program Planning Process

Confirm the target geographic regions and populations for MDA.

Following the annual review meeting, the NTDCP and HKI will hold a series of macro planning meetings where both will agree on the target geographic coverage and the target population for each MDA. One hundred percent geographic coverage for LF was achieved in 2010, and this has been maintained for all NTDs to date. All MDAs are conducted as described by WHO guidelines.

Conduct or update the TIPAC

The FGAT (Financial Gap Analysis Tool) now called Tool for Integrated Planning and Costing (TIPAC), was developed with support from Research Triangle International (RTI) in 2010 and it has not been reviewed since. HKI would like to support the MOHS to update the TIPAC tool, but requires technical assistance (TA). At the end of TA it is hoped that both the NTDCP and HKI NTD staff will be able to update the TIPAC tool in the coming years.

Five-year Strategic Plan, 2011-15

The NTD Master Plan has been developed for the period 2011-2015, however the plan is still in the draft stage. HKI is currently working with NTDCP to reflect the change in the new WHO guidelines and to finalize the plan. The plan captured all the components of NTD control, including MDA, morbidity and vector control. It is hoped that the finalized plan will be disseminated by NTDCP to donors and partners by the first quarter of FY13.

Develop Annual Work Plan for National NTD Program, as requested.

The priority activity during the fourth quarter of each calendar year is the development of the annual work plan for the coming fiscal year. This starts with the macro planning immediately after the annual review meeting, where all the lessons learnt over the past implementing year and recommendations from the review meeting are combined into a working document. This document is expanded to include the goals and the targeted population for MDAs in the next FY. While HKI, as sub grantee, takes the lead in its preparation, the work plan is developed with full participation of the NTDCP and other NTD partners. The work plan is based on the NTD master plan.

Develop planning and micro-planning at national, regional, district and sub-district levels.

Micro planning is organized using a bottom-top approach. It takes the form of mini-stake holders meetings at district, chiefdom and community level prior to each MDA. During these meetings, stakeholders at various levels give opinions on how NTD activities can be better planned and implemented based on lessons learnt from previous years. This information is brought forward to the annual NTDs review meeting by the NTD FPs, and is subsequently incorporated into the work plan. In the past, HKI and NTDCP developed basic information kits on how these meetings are planned and conducted at each level. These information kits are currently being reviewed by HKI, and made into guidelines to be used at district, chiefdom and community levels.

MAPPING

Mapping has been completed for all NTDs and no further mapping is required.

Scaling up NTD National Program

The 100% geographical coverage achieved since FY 10 will be maintained in FY13.

In FY 13 our target is to treat 5.8 million individuals for LF and STH in 14 HDs, 2.6 million for Oncho in 12 HDs, and 1.9 million people for schistosomiasis in 64 highly or moderately endemic chiefdoms in seven districts.

Treatment will continue to focus on the same target population for Oncho, LF and STH but for MDA SCH, it will be modified to include the at-risk adult population in chiefdoms that have prevalence of SCH infection between 10 and 50% (PCT once every two years) or above 50% (PCT once a year) as recommended per the current WHO guidelines. Consequently, at-risk adult population will be treated in FY13 in four chiefdoms (Kalansongoia, Konike Barina, Konike Sande, and Sambaia Bendugu) in Tonkolili district, two chiefdoms (Badjia and Komboya) in Bo district, and one cheifdom (Tombaka) in Bombali.

MASS DRUG ADMINISTRATION

MDA STRATEGY

WHO guidelines allow for IVM to be given to mothers one week after delivery, but due to Sierra Leones high maternal mortality rate, the NTDCP has extended this to 2 weeks after delivery. According WHO guidelines PZQ is administered to pregnant women in the 3rd trimester. However, due to the high maternal mortality rate, the NTDCP has also extended this exclusion criterion to include all pregnant women.

MDA LF-Oncho and STH

Community-based treatment for LF, Oncho, and STH will be repeated in 12 HDs according to WHO guidelines using the CDTI+ (Community Directed Treatment with Ivermectin plus Albendazole) approach, beginning in October 2012 for a period of 6-8 weeks. With the general elections slated for November 2012, it is possible that the MDA will be extended to cover whatever time might be lost during the election period to ensure effective coverage is obtained. Although the bulk of the funds will be coming from USAID, this activity is also co-funded by APOC and Sightsavers. The treatment will target all eligible populations in all villages and communities in the 12 HDs.

MDA LF Western Area

MDA for LF will be repeated in rural and urban WA using the National Immunization Day (NID) Strategy approach in September 2013, and is scheduled to take 5 days. Both community-based, and fixed distribution points will be utilized. The MDA will target everyone above the age of five as described by WHO guidelines. All activities included in MDA will be fully funded by USAID.

MDA SCH in 7 Districts

In June 2013, four districts (Kono, Koinadugu, Kailahun, and Kenema) will participate in MDA for the treatment of SCH, **while 3 districts (**Bo, Bombali, and Tonkolili) will participate at **sub-district level** in accordance with the new WHO guidelines. Highly endemic chiefdoms in Bo, Bombali, and Tonkolili will be treated annually, and moderately endemic chiefdoms every 2 years. MDA for SCH will be performed in the same manner as in FY12, by trained PHU staff treating school children plus at-risk adults in their catchment area. This MDA is estimated to take 5-7 days, depending upon the terrain.

Hard- to- reach communities

Sierra Leone has many populations that are considered hard to reach (HTR). Some are in remote, sparsely populated areas of the country, while others are in high population density slum areas. The main obstacles in treating HTRs are finding modes of transportation to reach these areas and assuring that sensitization and outreach messages reach these communities. Special strategies to reach the hard to reach areas (HTRs) include hiring boats to access riverine areas, hiring motorcycles to traverse difficult terrain and targeting the leaders of special groups

such as the motorcycle riders association and the drivers union with a special, tailored messages that can be disseminated to the entire group. Simply making HTRs a priority and talking about them through all phases of planning and implementation assures, not only that these populations are not missed, but that they are focused on. Through these practices we can close the treatment gap between HTRs and the general population.

Cross-border MDA

Synchronizing MDA at the common border points has not been achieved due to different timelines for MDA in the different countries sharing borders. To cope with the influx of persons that normally cross the borders into Sierra Leone for treatment during MDA, some strategies have been formulated to address the issue in FY13 and beyond. These include holding community meetings with residents of border regions in Kambia, Kono, Koinadugu (which border Guinea), Kailahun (which borders Liberia and Guinea), and Pujehun (which borders Liberia). Two meetings will be held in each border chiefdom; one meeting on the Sierra Leone side of the border and one meeting in the adjacent country. These meetings will attempt to get estimates of the number of people that will cross the border for treatment during MDA so that appropriate quantities of drugs can be ordered. These meetings will also discuss the supervision of the MDA, and will address any cultural issues so that border disputes can be avoided. In FY 13, the NTDCP and HKI want to do everything possible to assure that there are no drug shortages and every eligible person is treated.

NTD	Age group	Frequency	Platform(s)	# districts	# Targeted
Schistosomiasis*	5-14 years	Once a year	School based	7	568,044
	At risk adults	Once a year	Community	7	1,053,637
Oncho	<u>≥</u> 5 years old	Once a year	Community	12	2,564,958
LF	<u>≥</u> 5 years old	Once a year	Community	14	5,776,290
STH	<u>≥</u> 5 years old	Once a year	1 School based	14	1,136,461
		Once a year	1 Community		5,776,290
Trachoma	0	0	0	0	

Table 2. Target districts and estimated target populations for 2013 MDA

* Number of people targeted will be updated for schistosomiasis once the praziquantel application for 2013 is finalized.

Training

Group	Торіс	# To be Trained			#	Location
		New	Refresher	Total	Days	
МОН		0	0	0	0	0
DHMTs	MDA-LF-oncho-STH	5	34	39	1	Во
Supervisors	MDA-SCH	0	79	79	1	Bo and Makeni
	MDA-SCH	118	275	393	1	7 Districts
PHU Staff	MDA-LF	10	100	110	1	WA
	MDA-LF-oncho-STH	335	782	1,117	1	12 Districts
CHWs	MDA-LF-oncho-STH	1,100	1150	2,250	1	WA
CDDs	MDA-LF-oncho-STH	6,600	15,400	22,000	1/2	All PHUs
	Validation MDA-LF-STH	5	11	16	1	НКІ
						Conference
						Hall
Independent	Validation MDA-SCH	0	10	10	1	НКІ
monitors						Conference
monitors						Hall
	Validation MDA-LF	4	7	11	1	НКІ
						Conference
						Hall
Technicians	Pre TAS	1	7	8	2-3	12 Districts

Table 3 Training Events - New Personnel and Refresher

Refresher training

Refresher training of District Supervisors, NTD FPs and PHU staff for MDA-SCH is scheduled in the second quarter of FY 13 in 7 HDs. Training of trainers for MDA-LF-Oncho and STH in 12 HDs for DMOs, NTD FPs, MCH Aide Training Coordinators and refresher training of PHU staff and CDDs is scheduled for the last quarter of Year 5. The refresher trainings are designed based on our experiences in past years, as we realize there will be turnover among DHMT staff, PHU staff, and CDDs from year to year.

Training of new personnel

New training for trainers, PHU staff, and CDDs for PCT LF-Oncho-STH will occur at the same time as the staff receiving refresher training, and at no additional cost. New trainees will receive special attention at these trainings. The new trainees for the PHU staff are those that have not been trained previously. The new CDDs trainees are replacements for those who have left the NTDCP activities for employment opportunities or other reasons.

The content of the training will be varied according to the cadre of the trainees. It will cover the following: overview of LF, disease life-cycle, pathogenesis, signs and symptoms, the social,

economic, and psychological aspects of disease, community directed distributors (CDDs)/CHWs, timeline of MDA, treatment frequency, environmental control measures, data collection and all necessary forms required for drug distribution (tally sheet, pharmacy board drug reaction form).

Data Management

To improve data management capacity among NTDCP and HKI M&E staff, the NTDCP and HKI are proposing that 4 staff (2 from NTDCP and 2 from HKI) attend an NTD M&E course organized by Center for NTDs (CNTDs) in Addis Ababa, Ethiopia. Once trained, these staff will train the various M&E staff in the DHMTs, which will help to build their capacity and strengthen the overall NTD data management system.

Supply chain management of NTD medicines

With TA from END in Africa's supply chain partner, JSI, training on supply chain management and standard operating procedures will be integrated into training and refresher training of health staff, CHWs and CDDs. The health staff integrated training manual has also been made available to JSI for the inclusion of sections on logistics and drug management. Environmental management of waste should be executed according to the project SIEE (Summary Initial Environmental Examination), Attachment G of the sub agreement between FHI and HKI.

Community Mobilization and Information, Education, and Communication (IEC)

Community mobilization

Social mobilization through community meetings will be organized at chiefdom and village levels by NTD FPs, PHU staff and CDDs prior to MDA. These meeting are attended by traditional leaders: section chiefs, headmen, religious leaders and local teachers. Many Sierra Leoneans still live in traditional societies and need to be informed by their local headman that an activity should be supported. Experience from the recent past has also indicated that people tend to listen to the religious leaders more than other community leaders. Because of this, from FY 13 going forward, special social mobilization meetings will be held with religious leaders to encourage them to prepare special sermons on people's compliance with NTD treatments. They will also be encouraged to accept special roles such as 'goodwill' Ambassador for NTDs in their communities.

As a complementary and cost-efficient IEC strategy for social mobilization, the Community Radio Network "Talking Drums", which has networks with community radio stations throughout the country, will continue to be utilized to disseminate tailored messages and edited FAQs. FAQs include people's concerns, questions asked and SMS sent during radio discussions and phone-in programs. The revised FAQs will be used as standard guidelines for all future radio discussion programs and will also be disseminated during community meetings prior to, and during MDA.

As cell phone technology and use increase in Sierra Leone, the NTDCP and partners will continue to advocate with the management of AIRTEL, the largest mobile company operating in SL, to extend their corporate social responsibilities to the NTDCP to distribute free SMS messages, especially during the period of MDA SCH in schools and MDA LF in the WA.

Dissemination of IEC materials

Posters and flip charts have been developed, revised and disseminated to communities. The effective use of these materials will continue to be monitored. Going forward, the use of the edited FAQs will be emphasized.

Supervision

Support to NTDCP for supervision

Cost of maintenance of NTD vehicles and fuel has been included in the NTDCP operations budget. Available funds have made regular maintenance of the NTDCP vehicles possible and have enhanced the NTDCP staff's capability to supervise the NTD activities at all levels. At district level, the cost of hiring of motorcycles and providing fuel has also been included in the district budget to aid the NTD focal person in effective supervision. At PHU level, the cost of transportation for PHU staff to cover her/his catchment villages has been included in the budget, including during village social mobilization, CDD training and MDA.

WHO guidelines and MOH regulations

During the biannual NTD Taskforce meeting, the issue of current WHO and MOHS regulations for NTDs are discussed. As a technical organization, one of the key functions of HKI is to provide the technical support to NTDCP. HKI head office is well positioned to supply all the country offices with updated WHO guidelines as they are made available. These guidelines are immediately relayed to NTDCP, even if they had received the same guidelines from WHO or APOC. The HKI NTD Program Coordinator works closely with the national NTD Program Manager and other senior MOHS staffs to ensure MOHS guidelines and principles are adhered to. He will continue to attend MOHS technical meetings and to ensure that all MOHS rules and regulations are followed.

Monitoring of MDA to achieve targets

MDA is supervised at all levels: national, district and community. At national level, staffs from the NTDCP, HKI and Sightsavers supervise the MDA, whilst at district and community levels, DHMTs and community leaders also supervise the MDA. In addition to supportive supervision, independent monitors, selected largely from the Sierra Leone Pharmacy Board, Statistics Sierra Leone, Njala University and HKI, conduct both in-process and end-process monitoring of MDA. The in-process monitoring is used to assess the progress of the drug administration as it happens, and the findings are used as guides for the DHMTs to increase support to areas with low coverage. The results from end-process monitoring are used to verify the reported MDA coverage and also to recommend ways to improve coverage in the next round of MDA. Independent monitoring has been very effective in achieving MDA targets and improving coverage.

Issues encountered during MDA and how they can be overcome

Monitoring and supervision of MDA help to identify potential barriers to treatment during MDA. During monitoring of MDAs, issues such as drug shortages from mal-distribution of drugs or the presence of additional people unaccounted for in the CDD census are discovered and corrected. This is common in the mining communities where a lot of people have migrated to seek job opportunities. The DHMTs covering these mining communities will be encouraged to talk with mining communities in order to get the number of individuals employed by the mines and subsequently help them get correct overall estimates of the population. Independent monitoring can also help to improve MDA coverage, especially in HTR locations (as described above). Supervision of health staff and CDDs or CHVs gives the opportunity to evaluate if the health workers are performing activities correctly or if they need additional training.

How data collection is followed through pre-established procedures and protocols

Every year following refresher training, the CDDs conduct a census of the village population and keep it in the village register. The data from each village register is collated by the PHU incharge, verified by the NTD focal person, and forwarded to NTDCP at national level. The results of the eligible village census data are used to request the quantity of drugs needed for MDA. During MDA, the CDDs will administer drugs based on the census data, but will also add new members to the register who were not present during the period of the census and administer the drugs to them as well. At the end of the MDA, the remaining drugs are quantified and returned to the NTD warehouse in Makeni through the various PHU staff and the NTD FPs.

Supply Chain Management

Drug Projection and Application

Each year, drug applications for IVM and ALB are completed in March, normally after the MDA results for LF-Oncho and STH are available. The drugs normally arrive 4 months later in July/August. The completion date of the application for PZQ has varied. In 2011, the application form for PZQ was completed in October 2011 for MDA in June 2012. However PZQ did not arrive in country until September, 2012. Wherever possible, drug projections are based on population estimates obtained through CDD censuses, as they provide the most reliable population estimates, though 2004 national census data is also used when community enumeration data is not available.

Distribution of NTD drugs

All NTD drugs arriving in the country are cleared from customs by WHO and have a duty free concession status, however storage and handling fees are charged by the clearing agent. After the drugs are cleared through customs, the drugs are immediately taken to the NTD drug store in Makeni using NTDCP vehicles. Using the district summary of CDD census data for the eligible

population, the drugs are transported to DHMT drug stores and stored at district level just prior to MDA. Using the PHU summary census data, the drugs are distributed to the various PHU by the DHMTs. The PHUs, in turn, distribute the drugs to the CDDs using the eligible village census data.

How obstacles were overcome and lessons learnt were incorporated into future MDAs

In FY 12, the NTDCP experienced a delay in the arrival of PZQ, and IVM in the country. The PZQ arrived in the country two weeks prior to MDA SCH in the seven HDs. These delays in arrival had direct impacts on the distribution of the drugs to the districts and consequently to the various communities. To overcome these issues, distribution in some communities was further delayed as MDA teams waited for drugs to arrive. The MDA LF WA was postponed from June 2012 to November 2012 because IVM did not arrive until the second week of September. Another immediate constraint at the various DHMTs is the lack of functional vehicles to transport drugs to the various PHUs. Most of the vehicles supplied to the DHMTs in past years have broken down, making it difficult to distribute drugs in a timely manner.

Three improvements have been suggested for future MDAs. First, if accepted by the drug donation program, the NTDCP will complete the drug application form 10 months to one year in advance, based on population projections. Second, the MDA can be rescheduled for September to allow more time for the drugs to arrive in country, though this can have adverse effects as well if new MDA dates coincide with other priorities for the health workers and/or CDDs, such as harvest season or Christmas celebrations. Thirdly, the NTDCP vehicle could continue to be used from national level to distribute the drugs to district as well as to PHU, as was done in most districts in FY 12. The NTDCP only have three functional Hilux Toyota vehicles though, which is not enough to distribute drugs to all PHUs in the entire country. To remedy this situation, funds will be added to the budget to repair vehicles at central level so that more vehicles are available to assist with district level distribution.

Drug	Source	Quantity	Date of Application	Requested delivery date
IVM	MDP	14,553,563	March 2012	July 2012
DEC	0	0	0	0
ALB	GSK	14,553,563	March 2012	July 2012
MBD	0	0	0	0
PZQ	USAID	4,054,203	July 2012	April 2013
Zithromax	0	0	0	0
Zithromax	0	0	0	0

Table 4:	NTD Medicines	Estimated	for the ye	ear FY13
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Tetracycline	0	0	0	0

Management of Serious Adverse Events

Monitoring of SAEs, communication channel and reporting

Health staff and CDDs are trained regarding directly observed treatment, exclusion criteria, common side effects, recognition and response to serious adverse events (SAEs). During social mobilization, communities are informed about common side effects. Monitoring of SAEs is performed by CDDs who refer any patients to the PHU for case management. The PHU staff report to the DHMT, who reports to the NTDCP using reporting systems established by WHO and SLPB. The NTDCP will immediately inform HKI and WHO of any SAEs, and HKI will inform FHI360 by email. The reporting forms include a phone hotline and email address. In 2011, the monitoring and management of adverse drug reactions was expanded to include the National Expert Committee for Adverse Drug Reactions (NEC/ADR), a body of physicians, public health specialists, pharmacists from SLPB, pathologists, and representatives from WHO and NGOs, and put together by the MOHS. The NEC/ADR is charged with the responsibility of monitoring adverse drug reactions for all MDAs and campaigns organized and implemented by MOHS. The role of NEC/ADR will continue to be expanded as a technical assistant for monitoring and managing the SAEs in FY13.

Program Monitoring and Evaluation

Monitoring and Evaluation of MDA

Timeline for reporting M&E deliverables

The data derived from M&E deliverables will be reported in the semi-annual report and/or in the M&E workbook. This will be updated during subsequent work planning sessions, semiannual reporting sessions, or the in the report of MDA data. The data collection tools currently used by NTDCP cover all required aspects of USAID and WHO/APOC reporting. All data on training and MDA are disaggregated by gender for all target NTDs.

Data collection tools and reviewing of data quality

A set of monitoring and evaluation (M&E) tools, which include questionnaires, will be administered to community leaders, CDDs, DHMTs and community members to assess the extent and quality of activities performed. The data derived from M&E deliverables are cross checked and fed back to the DHMTs at the annual review meeting and will also be reported in semi-annual reports. All data on training and MDA are disaggregated by gender for all target NTDs. In addition to the routine M&E, an independent monitoring tool, which provides real-time performance indicators during MDA termed 'in-process monitoring' is utilized to help the DHMTs overcome problems with supplies, refusals, distribution or other issues. The 'end-process monitoring' will be used to obtain final MDA coverage figures to augment the NTDCP report, especially in hard-to-reach locations (HTR) and in urban settings such as the WA, where

accurate population data is unavailable. Independent monitoring has been particularly useful in hard-to-reach locations to improve and verify therapeutic coverage and gender disaggregation. Although not as rigorous as a coverage validation survey, it is less costly and more useful to program implementers since corrective measures can be initiated in real time

To further improve the quality of M&E at all levels, it has been proposed that the NTDCP and HKI M&E staff attend a tailored NTD M&E course at Addis Ababa, Ethiopia designed and organized by CNTD. It is hoped that the training obtained by these personnel will cascade down to health staff and CDDs during training and refresher training. Also to keep abreast with the new global trend of NTD control and increase the technical expertise of the NTD Program managers, it has been proposed that three technical staff attend the Global Course on NTDs.

Program Assessments and Transition to Post-MDA Elimination Strategy

The LF elimination is progressing well and is on course to eliminate LF after six effective rounds of MDA in the 12 HDs. Since national scale MDA LF was achieved in 2010, there has been an effective epidemiological and program coverage for all target NTDs. The implementation of NTD activities has been integrated into the health system of Sierra Leone under the primary health care system. This means that all the DHMTs are directed to implement NTD activities as part of the MOHS basic health delivery treatment through PCT.

Pre TAS (Transmission Assessment Survey) for LF

As part of the elimination strategy, a "mid-term LF impact assessment" was carried in out in 12 districts after three rounds of effective and successive MDAs in the second half of FY12. Results from this study showed the mf prevalence had decreased to <1.0% in all the 12 HDs except Bombali. The mf prevalence in Bombali district was recorded as 1.5% compared to 6.9% obtained at baseline in 2008. In 2013, a pre TAS for LF will be conducted in 12 HDs to assist with a policy decision about the cessation of MDA and the commencement of disease surveillance in the 12 HDs. The assessment for monitoring and evaluation will be coordinated with the Liverpool CNTD, which is planning a study to verify the absence of LF transmission in two districts (Bo and Pujehun) using parasitological, serological and entomological methods. Sentinel site surveys from these two districts were unable to detect mf carriers, so the CNTD wants to determine the impact of MDA for oncho and vector control measures on LF transmission intensity. USAID funded TAS will be coordinated with this study. It is hoped that the CNTD M&E training received by both HKI and NTDCP M&E officials will further improve the quality of the Pre TAS. A member of NTDCP/HKI M&E team will also attend the upcoming TAS training organised by the WHO.

SCH assessment

An impact assessment for SCH conducted in the seven schistosomiasis districts in 2012 after three effective rounds of MDA found a 66.3% reduction in prevalence and a 51.7% reduction in intensity of SCH infection. SCH treatment will continue in at risk communities according to WHO guidelines until disease control is achieved. There is no assessment plan for schistosomiasis or STH in FY13.

Oncho assessment

The results of an mf epidemiologic survey conducted by APOC and NTDCP for Oncho in 2010 showed a reduction in prevalence and intensity from the baseline surveys performed in 2002-4 in the respective sentinel sites. After five rounds of MDA, of the 41 sites sampled in the 12 HDs in 2010, only 3 sites had hyper endemic villages. Two of these sites were in Moyamba district and one site was in Bo district. Additionally, seven districts had meso endemic villages with prevalence slightly greater than 20%, while five districts have lowered Oncho prevalence to below public health significance. To evaluate how long the country will continue to treat for Oncho, an entomological survey for Oncho was conducted by APOC and NTDCP in 2011 and the results are still being analysed. APOC will furnish the final report to the Government of Sierra Leone once it is completed. There is no assessment plan for Oncho in FY13.

In FY 2012, APOC conducted independent participatory monitoring of NTDCP with emphasis on community directed treatment with ivermectin, CDTI. Although draft reports from this appraisal described the NTDCP as working well and on track to control/eliminate onchocerciasis, it revealed that data management at all levels was a challenge, and an area that needs strengthening.

M&E activities and Independent Monitoring

The M&E tools, including questionnaires, will be administered to community leaders, DHMTs, CDDs, and community members to assess the level and extent of the NTD activities completed. In addition to routine M&E activities, both in-process and end process independent monitoring will be conducted for all MDAs in FY13. The in-process monitoring will help to assess issues with supplies and refusals and will be reported on daily to the DHMT so that remedial actions can be put into place. The end process will be used to obtain final coverage figures to enhance the NTDCP report, especially in HTR locations and in urban settings such as the WA.

MOH actions plan for transitioning from MDA to post-MDA surveillance

A national advocacy meeting, held annually to sustain the commitment of the MOHS and other stakeholders to NTD control in Sierra Leone, will be held in the first guarter of FY13 to ensure continued commitment from partners and stakeholders, support of human resource development and integration of activities to control/eliminate all NTDs into the primary healthcare system and national health curricula for FY13 and beyond. As NTDCP moves towards disease control and elimination, more emphasis will be put on M&E in all aspects of program implementation. During the MOHS surveillance annual review meeting in 2013, the NTDCP will propose the inclusion of NTD surveillance in the MOHS in all surveillance systems. This will ensure sustainability and help to prevent recrudescence of the diseases. In a bid to meet elimination targets, especially in future disease control coordination efforts, representatives of the NTDCP in Sierra Leone, including HKI-Sierra Leone staff, MOHS personnel, and Sightsavers staff will attend a meeting in Ivory Coast with other MRU leaders and NTD control stakeholders in October 2012 to discuss the risk of cross border recrudescence of diseases and other essential components of the post-elimination strategy. Transition and post-elimination st rategies are a key element in the new Integrated NTD 5 year Master Plan (2011-2015). A course of action will be defined after the meeting with the MOH.

Short term Technical Assistance Request¹

The NTDCP, in collaboration with its partners, requests TA in the following tasks highlighted above.

Task	Technical skills required	# Days
SCM	Supply Chain on NTD Drugs, Standard Operating Procedures and	7 days
	training of NTD store keeper on Supply Chain management.	
Pre TAS	Pre TAS Protocol and training of field personnel: Dr Zhang (RO)	5 days
FOG	FOG Mechanism	TBD
TIPAC	Training NTD Finance and Technical staff on TIPAC	TBD

Table 5: Technical Assistance Requests

TA on drug management

TA is required from FHI for integrating standard operation procedures for drugs management into the training curricula, and to execute a TOT training to the districts health management team members. The SCM training will also cover waste management of the NTD drugs and logistics with emphasis on burying empty drug tins as described in the WHO guidelines. SOPs to be addressed are: storing and inventory control, waste management, medicine handling during and after MDAs (maintain quality and ensuring ability to track and consolidate), physical inspection of drugs packaging, distribution planning (includes reverse logistics and redistribution), documenting SAE.

TA on Pre TAS

The NTDCP has also requested TA to help with Pre TAS protocol and training of field agents. We anticipate 5 days, though the SoW will developed following ENVISION forms.

TA on FOG (Fixed Obligation Grant) Mechanism

As we transition from the contracting format into using the FOG mechanism, TA has also been requested to help HKI and NTDCP understand and comply with all USAID regulations, as required by FOG. As a formal request, we will complete and submitted to FHI.

TA on updating TIPAC

Since the FGAT tool was developed in 2010, it has not been updated. The NTDCP has also requested TA to help update the TIPAC tool in FY13 and to train both HKI and NTDCP staff on how to update the tool in subsequent years. A formal request we will be completed and submitted to FHI.

Financial Management

Utilization of USAID funds in accordance with regulations

The USAID NTD Grant is managed by the HKI Finance Manager, who, in collaboration with the HKI NTD Program Coordinator, verifies compliance of expenditures with donor requirements, financial controls, and contract and tender processes. He, with supervision form the HKI Country Director, provides the day-to-day financial and operations support, and is in charge of the financial team at the HKI SL office. The original justifying documents from NTDCP and DHMTs are maintained at the country office and are available for audit. As we transition from the contracting format to the FOG mechanism, we will work with FHI360 to understand and comply with all USAID regulations as required by FOG.

Training of MOH on USAID financial requirement

The training of NTDCP, DHMTs and PHU staff on USAID financial management will continue to be integrated in the training and refresher training programs. Recommendations from the recently completed financial sampling of MDA expenditures will be included in the future training and refresher training at all levels. Training will also be conducted with DHMTs financial officers on FOG mechanisms prior to its introduction.

Other partners' contribution

Both APOC and Sightsavers are still committed to supporting NTDCP. However, as these partners operate on different financial time frames from USAID, they have yet to commit their financial obligation FY13. This will be made available by January 2013. Below is their previous year's commitment.

Donor	Type of donation	Support for MDA in	Support for	
		In districts funded by USAID	In districts NOT funded by USAID	non-MDA activities
GOSL		0	0	
APOC		92,738	0	
SS		13,842	0	
WHO	Regional Training	12,000	0	M&E
WHO	Regional Training	12,000	0	TAS
LCNTD	Pre-TAS			Contribution in \$US unknown at this time

Other Partner Contribution (US\$)

Facilitate Collaboration and Coordination

Commitment from the government and various stakeholders to increase awareness, visibility, and funding for the National NTD Program

Over the years, strategic advocacy efforts have been planned and executed to mobilize the Government of Sierra Leone's (GOSL) political and financial support for the NTDCP. These advocacy and social mobilization efforts have targeted stakeholders at all levels: at the national level targeting the policy makers (parliamentarians, councilors), at the district level targeting mayors, district councils, and heads of paramount chiefs, and at the community level targeting community leaders, religious leaders, chiefs and youth groups. These efforts have yielded results, as demonstrated by the attendance of senior level MOHS staff at NTD meetings, including the NTD stakeholders meeting, which is chaired by the Director of Disease Prevention and Control. The program manager, Environmental health and a member of the senior management team, MOHS participated in the development of the five-year NTD Master plan.

The GOSL continues to meet its obligation to pay NTD staff salaries and other administrative expenditures as estimated by TIPAC for January-December 2011. National costs such as salaries, fuel, and vehicle maintenance totaled 120,671.79 USD. District costs, including salaries, which were weighted based on the amount of time spent working on NTD activities, totalled 46,811.49 USD. Despite this, the government has yet to disburse funds for the implementation of NTD activities.

Describe how the program will engage the broader health community: child health weeks and vitamin A campaigns.

The NTDCP will continue to collaborate with other health Intervention programs that have direct links with the success of the program. Although integration of MDA within broader health campaigns, such as mother and child health week (MCHW), has not been feasible, efforts have been made to synchronize activities for maximum benefit of all beneficiaries. In FY11, MDA LF-Oncho-STH in 12HDs was integrated with the distribution of long lasting insecticides treated nets (LLITNs) in Bo, Bonthe, Moyamba, Koinadugu, and Kono districts. The report from independent monitoring indicated that MDA coverage rates were comparatively high in the districts where MDA and distribution of LLITNs was integrated. The NTDCP will continue to advocate for such integration where possible, however it is anticipated that bed net distribution in the future will only target pregnant women and children less than 5 years of age, which is not our target population for MDA.

The commencement of indoor residual spraying (IRS) of mosquitoes in the WA, Bombali, Kono, Kenema districts by the National Malaria Control Program (NMCP), like the universal distribution of bednets, is in line with the NTDCP goal to eliminate LF. The NTDCP will continue to collaborate with the NMCP and other partners to extend IRS to the other districts.

Disseminate approved work plan to MOH and stakeholders

After the approval of the work plan, a stakeholder meeting will be convened where the approved work plan will be disseminated to senior management of MOHS, NTDCP, DHMTs and all other stakeholders.

Coordination: planning, resource allocation, management, monitoring

The NTD coordinating body will continue to be strengthened under the leadership of the MOHS. Coordination and transparency in partnerships with APOC and Sightsavers will be strengthened especially during budget preparation and implementation to maximize resource allocation. As we move towards NTD control and elimination, the NTDCP will continue to coordinate the NTD stakeholders meeting for better planning, management and monitoring for sustainability.

Donor support from domestic resources under national strategic and annual work plans

As part of the strategy to achieve sustainability, HKI will continue work with our local and international partners, including Sightsavers, USAID, and APOC, to hold numerous advocacy events with the GOSL for the inclusion of NTDs into its new agenda for prosperity. We will also utilize social mobilization within the communities to increase support among local, religious and traditional leaders, increase motivation of CDDs and strengthen disease monitoring at sentinel sites. Recommendations from the annual review meeting will be discussed and addressed for program sustainability. Also in FY 13, our advocacy efforts will attempt to convince mining and cell phone companies operating within the country to extend their corporate social responsibility to the various communities where they operate.

Cost-efficiencies

How cost efficiencies anticipated to be achieved and describe additional opportunities for cost efficiency that you plan to pursue.

HKI will continue to implement cost efficient strategies that have been effective in the past. Training and refresher training for PHU staff has been reduced from 1 day to ¾ day, allowing travel to and from the training site to occur in the same day, while refresher training for CDDs will remain one half day. Trainings and refresher trainings will be integrated into other activities in order to reduce the number of training events and logistical expenses. No new training manuals and IEC materials will be developed, but those developed in past years will be revised as required. The use of the media will be increased as opposed to print materials, which tend to be more expensive. The use of interactive radio programs allows more flexibility and less cost to tailor communications and social mobilization within a maturing program context. Collaboration with the Community Radio Network "Talking Drums", air jingles and discussions for nation-wide distribution will be strengthened.

Proposed Plans for Additional Support to National NTDCP (case-by-case basis)

Describe opportunities for supporting the morbidity management plans of the National NTDCP.

The process towards morbidity control has begun. Over the last three years, Johnson & Johnson has hired a consultant from the Ghana Military Services who has since trained 50 Sierra Leonean doctors of the MOHS on new hydrocele surgical techniques. All the trainees now successfully conduct hydrocele surgery using the new surgical techniques. In the next six months, it is hoped that 10 additional doctors will be trained with support from Johnson & Johnson. Morbidity control remains the only activity that is currently not funded by any donor. The NTDCP, through the CDDs, has conducted an estimate of all those living with lymphodema

and hydrocele throughout the 12 HDs. During the FGA tool/TIPAC the NTDCP has estimated the cost of treating the current backlog of 3,600 hydrocele patients as 265,787 USD. In the fourth quarter of FY 13, the NTDCP will develop a proposal on the current backlog of cases of lymphodema and hydrocele to USAID for possible funding.

Describe any proposed opportunities to support integration of the National NTDCP with other platforms (incorporation of NTD messages into WASH or vice versa).

The NTDCP will continue to work with the National School and Adolescent Health Program (NSAHP) on the control of SCH and STH. As we move towards the control of SCH and STH, the NSAHP WASH program is one of the areas identified for collaboration in the short term. Improving WASH in previously SCH and STH endemic districts is essential to maintain the advances already achieved. The NTDCP and NSAHP will work together to integrate messages on SCH and STH control and WASH.

Cost Share

Funds from World Bank as part of their Fast Track Initiative for de-worming school-aged children will contribute as cost share to this grant in FY 13. HKI anticipates receiving nearly US \$250,000 for the second de-worming of school-aged children in the 12 HDs.

In FY12, a second de-worming of school-aged children took place in the 12 HDs six months after the MDA for LF to maximize the de-worming benefits costing \$249,989. A gift in kind of over 2 million annual doses of melbendazole is anticipated from Deworm the World and other local partners.

CIDA funds will continue to contribute towards the twice yearly VAS and albendazole deworming for children 12-59 months during MCHWs in May and November. An estimated 15% of the CIDA budget will be used for cost sharing.

With funds from Johnson and Johnson, 10 more MOHS doctors will be trained on new hydrocele surgical techniques in FY13. The cost of training of 10 doctors is about \$5000 USD. This excludes the cost of consultant hire.

Table 7. Summary of the HKI Sierra Leone Cost Share (US\$)						
Project	FY 13	Total				
CIDA: VAS and de-worming of children ≤five yrs		TBD				
FTI for de-worming school aged children (TBC)	250,000					
Johnson and Johnson – Surgical training for hydrocele surgery	5,000					
TOTAL	255,000					

Travel Plans

Dr Zhang from Regional Office should come for a 5 day training and supportive supervision of the pre TAS survey in 12 districts in May 2013 and again for a second visit of 7 days for training and supportive supervision of the TAS in September 2013. Travel to present abstracts of the mid-term impact assessment for LF and SCH at the Association of Tropical Medicine and Health in November 2012 is also proposed. The NTD Program Manager and HKI-NTDCP should attend the Mano River Union (MRU) in October 2012 in the Ivory Coast for 3 days.

Staffing

The composition of the MOHS NTD team at national level include the Director of disease prevention and control, who is the chairman of the NTD task force, the program manager, national supervisors and the administrative and finance manager of the NTDCP. The NTD task force is made up of the director, Disease Prevention and Control, the program manager, the NTDCP, the NTD advisor, the WHO, the Country Directors, HKI and Sightsavers. At the district level, the NTD team is led by focal persons and at the community level the team consists of PHU staff and the CDDs or CHWs.

The HKI NTD team comprises of: the Country Director, who is responsible for overall management of the project to ensure that the objectives and financial requirements are met; the NTD Program Coordinator, who oversees the day-to-day management of the program, ensuring smooth implementation and timely reporting through close coordination with governmental partners; the Finance Manager, who is responsible for financial management of the grant and ensures that United States Government policies and procedures are met; the NTD Program Assistant, who assists the program coordinator with management of the program and the M&E Officer, who plans and oversees monitoring and evaluation of the program. There has been no change in the composition of project staff since FY 12.

Environmental Monitoring Plan

Previously, labels were removed from the empty tins generated after MDA and reused for domestic purposes such as storage for salt, palm oil (bigger tins), paper, or palm wine. From FY 13 going forward, training on SCM will include environmental management of waste according to the project SIEE (Attachment G of the sub agreement between FHI and HKI). In the event that the NTD drugs expire, the PHU staff will return the expired drugs to the DHMTs, who inturn return them to the NTD warehouse in Makeni. The NTDCP program manager will then write to the SLPB, whose staff will collect the expire drugs in person, and destroy them by burning. The destruction will be witnessed by senior staff at the MOHS and by the Sierra Leone Police. The SLPB is the only body in Sierra Leone that has the official mandate to destroy expired drugs.

Timeline of Major	Activities: im	plementation i	in the S	Scope of FY 13.

Activity	0	Ν	D	J	F	Μ	А	Μ	J	J	Α	S
Drug delivery, clearing, logistics, security Oncho-LF-STH												
Provision of Materials needed for MDA Oncho-LF-STH												
MDA: Oncho-LF-STH in 12 HDs		х										
NTD Drug applications for donors									х	х	Х	х
MCHA MDA- Oncho-LF-STH in 12 HDs HQ towns		х										
Collection, Analysis & Reporting MDA Oncho-LF-STH 12HDs			х	Х								
NTD Curriculum distribution						х						
Pre TAS for LF 12HDs						х						
Participation in MRU Meeting												х
Branding									х			
Training on TIPAC					х							
NTD Review Meeting with DHMTs and partners						х						
Macro-planning for MDA-LF-WA									х	х		
Advocacy meeting for LF-STH WA											х	
Social Mobilization for LF-STHWA											х	
PHU Staff Training for LF-STH WA												х
IEC materials							х				х	
Training of CHWs for MDA-LF-STH WA												х
MDA–LF-STH WA												х
Independent Monitoring MDA –LF-STH WA												х
Training of Supervisors – SCH in 7 HDs								х				
Refresher Training of 393 PHU Staff for SCH 7 HDs								х				
Advocacy Meeting for MDA-SCH in 7 HDs									х			
Feeding of school children prior to MDA-SCH									х			
Social Mobilisation for MDA-SCH in 7 HDs									х			
MDA SCH in 7 Districts									х			
Collection, Analysis & Reporting of MDA SCH									х			
Independent Monitoring MDA SCH & MDA Oncho-LF-STH		х							х			
Training of Trainers-Oncho-LF-STH										х		
Training of PHU staff MDA Oncho-LF-STH in 12 HDs										х		
Advocacy Meetings MDA Oncho-LF-STH in 12 HDs											х	
Advocacy Meetings Private practitioners MDA LF-STH WA											х	
Social Mobilisation for Oncho-LF-STH in 12 HDs											х	
Social Mobilisation for LF-STH WA											х	
Refresher Training of CDDs												х
Incentives for CDDs										х		
Project vehicle & motorbike hire for NTDCP-focal points		х					х			х	х	х
Vehicle repairs and maintenance NTDCP & NSAH		х					х					
Administrative support for NTDCP & NSAH		х					х					