MINUTES OF MEETING
BETWEEN
JAPANESE MID-TERM REVIEW TEAM
AND
AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF THE UNION OF MYANMAR
ON
THE MAJOR INFECTIOUS DISEASE CONTROL PROJECT PHASE 2

The Japanese Mid-term Review Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA"), headed by Ms. Ritsuko Sakamoto visited The Republic of the Union of Myanmar (hereinafter referred to as "Myanmar") from 2nd September to 29th September, 2013 for the purpose of the Mid-term Review of "The Major Infectious Disease Control Project Phase 2" (hereinafter referred as "the Project").

During its stay in Myanmar, the Team reviewed the achievements of the Project and had a series of discussions with authorities concerned in the Ministry of Health of Myanmar (hereinafter referred as "the MoH") for further improvement of the Project.

As a result of the study and discussions, both sides agreed upon the matters referred to in the document attached hereto.

Nay Pyi Taw, 27th September 2013

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Ms. Ritsuko Sakamoto
Leader
Mid-term Review Team
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27/9/13

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Deputy Director General
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THE ATTACHED DOCUMENT

Through the discussions regarding the progress of the Project with the MoH and related organizations in Myanmar and JICA experts, the Mid-term Review team (hereinafter referred to as "the Team") compiled the result of the Mid-Term Review as a Joint Mid-Term Review Report. Both Myanmar and Japanese sides concurred on the contents of the Report attached as APPENDIX I. It was further agreed that the Project Development Matrix (hereinafter referred as "PDM") ver.2 of Tuberculosis and Malaria be replaced by the PDM ver. 3 attached hereto.

APPENDIX I : Mid-Term Review Report
APPENDIX II : PDM
HIV/AIDS: ver.2 (dated 28th June 2012) and ver.3 (dated 27th September)
TB: ver.2 (dated 5th December 2012) and ver.3 (dated 27th September)
Malaria: ver. 2 (dated 28th June 2012) and ver.3 (dated 27th September)

END

Joint Mid-Term Review Report
on
The Major Infectious Disease Control Project Phase 2

Department of Health
Ministry of Health

Japan International Cooperation Agency

September 2013

ABBREVIATIONS

3MDGF:	Three Millennium Development Goal Fund
AIDS:	Acquired Iimmuno-Deficiency Syndrome
ART:	Anti-Retroviral Therapy
ASEAN:	Association of South-East Asian Nations
BCC:	Behavioral Change Communication
BHS:	Basic Health Staff
BTS:	Blood Transfusion Service
CBTBC:	Community Based TB Care
CDC:	Centers for Disease Control and Prevention
CDR:	Case Detection Rate
CME:	Continuous Medical Education
DAC:	Development Assistance Committee
DOTS:	Directly Observed Treatment Short-course
EQA:	External Quality Assurance
GAVI:	Global Alliance for Vaccines and Immunizations
GF:	Global Fund to Fight AIDS, Tuberculosis and Malaria
GIS:	Geographical Information System
GOJ:	Government of Japan
GOM:	Government of Myanmar
GP:	General Practitioner
HIV:	Human Immunodeficiency Virus
IEC	Information, Education, Communication
INGO:	International Non-Governmental Organization
IOM:	International Organization for Migration
JATA:	Japan Anti-Tuberculosis Association
JICA:	Japan International Cooperation Agency
MARC:	Artemisinin Resistance Containment
M&E:	Monitoring and Evaluation
M-CCM:	Myanmar Country Coordination Mechanism
MCH:	Maternal and Child Health
MDG:	Millennium Development Goal

MDR:	Multi-Drug-Resistant
MIDC:	Major Infectious Diseases Control
MLR:	Malaria
MMA:	Myanmar Medical Association
MOH:	Ministry of Health
NAP:	National AIDS/ STD Program
NBC:	National Blood Center
NEQAS:	National External Quality Assessment Scheme
NGO:	Nongovernmental organization
NHL:	National Health Laboratory
NMCP:	National Malaria Control Program
NTP:	National Tuberculosis Program
NTRL:	National TB Reference Laboratory
PDM:	Project Design Matrix
PLHA:	People living with HIV/AIDS
PMTCT:	Prevention of Mother-To-Child Transmission
PPM:	Public–Private or Public–Public Mix
PSI:	Population Services International
RHC:	Rural Health Centre
STD:	Sexually Transmitted Disease
SOP:	Standard Operating Procedure
STI:	Sexually Transmitted Infection
STLS:	Senior TB Laboratory Supervisors
TB:	Tuberculosis
TMO:	Township Medical Officer
TOT:	Training of Trainers
TSG:	Technical and Strategic Group
TSR:	Treatment Success Rate
UN:	United Nations
UNAIDS:	Joint United Nations Program on HIV/ AIDS
Union:	International Union against Tuberculosis and Lung Disease
UNOPS:	United Nations Office for Project Services

USAID:	United States Agency for International Development
VBDC:	Vector Borne Disease Control
VCCT:	Voluntary Confidential Counselling and Testing for HIV infection
WHO:	World Health Organization

Contents of the Mid-Term Review

1. Scope of Mid-Term Review

1-1 Background of the Mid-Term Review

In Myanmar, infectious diseases have been posing serious problems in the health of the population and causing great socio-economic burden to the society. Particularly, controls of HIV/AIDS, tuberculosis and malaria have been major challenges in health sector in Myanmar.

In response to the request of Government of Myanmar (hereafter referred to as "GOM"), to assist the control of three infectious diseases (HIV/AIDS, tuberculosis and malaria), after a series of investigation and discussions. The Major Infectious Diseases Control (MIDC) Project started in January 2005 as a 5-year project. Various activities have been conducted in close collaboration between JICA and Ministry of Health (hereafter referred to as "MOH") in the project. As a result, the project achieved many outcomes like introducing blood donor deferral system and external quality assurance scheme for HIV tests, conducting TB prevalence survey in Yangon and establishment of community-based malaria control etc..

However, in the view of the necessity of further strengthening the controls of HIV/AIDS, Tuberculosis and Malaria and to expand the outcome of the past 5-year cooperation, GOM and JICA agreed with the extension of the project for 2 years to 18 January 2012.

GOM requested for Government of Japan (hereafter referred to as "GOJ") to conduct the Major Infectious Diseases Control Project Phase 2 to strengthen the activities which have been conducted so far, and to follow up the each impact of the current project to improve the health status in Myanmar.

Passing the half-way point of the implementation period of the Project, the Mid-Term Review Team (hereafter referred to as "the Team") was formed in accordance with the JICA evaluation guidelines for the purpose of reviewing the progress and performance so far of the Project as well as to have common understanding of the course of the Project for the remaining period. The Mid-Term Review done from 2nd September to 27th September, 2013.

This Mid-Term Review is undertaken by the Team with the involvement of national and

Divisions/States health authorities of Myanmar.

1-2 Objectives of the Mid-Term Review

The objectives of the Mid-Term Review are as follows:

(1) To review and evaluate the inputs, activities and achievements of the Project, and to summarize the achievement of the Project,

(2) To execute a comprehensive evaluation on the achievement of the Project from the viewpoint of the five evaluation criteria of DAC, and

(3) To make recommendations on the measures to be taken so that the Project will achieve the project purpose.

1-3 Joint Review Team

The composition of the review term dispatched from Japan is shown below.

No	Name	Mission Title	Organization/ Occupation	Period
1	Ms. Ritsuko SAKAMOTO	Leader	Advisor, Health Divion3, Human Development Department, JICA	From Sep. 18, 2013 To Sep. 28, 2013
2	Dr. Masahiko HACHIYA	Advisor (HIV/AIDS)	Head, Infectious Disease Control Group, Department of International Medical Cooperation, NCGM	From Sep. 18, 2013 To Sep. 28, 2013
3	Dr. Satoshi NAKAMURA	Advisor (Malaria)	Research Fellow, Department of Tropical Medicine and Malaria, Research Institute, NCGM	From Sep. 18, 2013 To Sep. 28, 2013
4	Ms. Hiroko SAKAI	Cooperation Planning	Associate Expert, Health Divion3, Human Development Department, JICA	From Sep. 18, 2013 To Sep. 28, 2013
5	Mr. Takayasu OTAKE	Consultant	Director, RECS International Inc.	From Sep. 2, 2013 To Sep. 28, 2013

1-4 Framework of the Project

1-4-1 Outline of the Current Project Design

(1) HIV/ AIDS

As per the PDM ver.2 dated 28 June 2010, a narrative summary of the Project is described as follows.

1) Overall Goal

Transmission of HIV and syphilis due to blood transfusion is prevented at low level

2) Project Purpose

National AIDS Program is strengthened for preventing HIV transmission through blood transfusion in collaboration with NHL and NBC, and for managing data

3) Outputs

1. Safe blood donation is enhanced
2. Quality of screening of HIV and syphilis on donated blood is ensured
3. Capacity of data management and analysis on HIV/AIDS control activities is improved

(2) TB

As per the PDM ver.2 dated 5 December 2012, a narrative summary of the Project is described as follows.

1) Overall Goal

To halt and reverse the TB incidence by the year 2015

2) Project Purpose

TB Control in Yangon and Mandalay Regions is improved

3) Outputs

1. Capacity for program management and data management for TB control is strengthened
2. Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with Stop TB Strategy

(3) Malaria

As per the PDM ver.2 dated 28 June 2010, a narrative summary of the Project is described as follows.

1) Overall Goal

Implementation/monitoring capability of National Malaria Control Program is improved in the Target area

2) Project Purpose

Implementation/monitoring capability of National Malaria Control Program is improved in the Target area

3) Outputs

1. Myanmar Artemisinin Resistance Containment (MARC) Project is strengthened in the MARC area
2. Community based malaria control is effectively conducted in Bago Region
3. Capability of program management at different levels of malaria and other vector borne diseases is strengthened nationwide
4. Outcomes from the Project are effectively utilized among the partners for further strengthening of National Malaria Control Program

2. Review Process

2-1 Methodology of Review

The Mid-Term Review was conducted by the following process and methodologies:

1) Review of the documents related the Project, sentinel

2) Identification of the issues and items requiring further examination for the Review,

3) Preparation of the Review questions,

4) Semi-structured interviews with stakeholders of the Project using the questions,

5) Analysis of the results accordingly with the five evaluation criteria listed below, and

6) Discussion with the core stakeholders of the Project on the analysis for alteration of the Project's plans as greed among the core members of the Project.

2-2 Five Evaluation Criteria

The Review analysis employed the following five criteria:

1) Relevance: which examines the Project's relevance 1) with the national policies of Myanmar, the priority needs of the society and the people, 2) with Japan's

development cooperation policies and approaches, 3) regarding the expected contribution of the Overall Goal realization, 4) among the Project Purpose and Outputs and their Activities, and 5) other relating current political, economic and social situations in Myanmar,

2) Effectiveness: which examines the appropriateness of the Project's approaches and actions for attaining the Project Purpose,

3) Efficiency: which examines the appropriateness and productivities of the Inputs for attaining the Project Purpose,

4) Impact: which examines the contributions of the Project for the realization of the Overall Goal and other positive and negative effects caused by the implementation of the Project, and

5) Sustainability: which examines the likeliness of the continuities of the Project's results and/ or their further developments by the owner entities.

3. Project Performance

Since the Project is a composite of the three projects called as HIV/ AIDS Component, Tuberculosis (TB) Component, and Malaria (MLR) Component, the Project performance are described by the Component basis utilizing the currently effective PDMs while the Input for the entire Project is shown separately for the Component performance.

3-1 Input for Entire Project

(1) Local Cost Allocated and Inputs by Japanese Side

Until July2013 USD234,589 had been allocated by Japan side for the Project operations as following amounts in FY 2012/13 and 2013/14. It covered the costs for the Project office rental and operations.

	FY 2012/13	FY 2013/14 until	Total

		July	
Local Cost	USD168,469	USD66,120	USD234,589

(2) Japanese Experts:

2 Experts of Team Leader and Coordinator had been assigned basically as Long Term Experts with 33 M/M. Absence of Coordinator as Long Term Expert has currently been substituted by a Short Term Expert.

3-2 HIV/ AIDS Component

3-2-1 Inputs

(1) Local Costs and Inputs by Japanese Side

4) Local Cost

Until July2013 USD102,437 had been allocated by Japan side for the Component operations as following amounts in FY 2012/13 and 2013/14. It covered the costs for the training course for Blood Safety, NEQAS, TOT on STIs syndromic management, IEC materials, and necessary expenses for trainings and joint supervisory visit.

	FY 2012/13	FY 2013/14 until July	Total
Local Cost	USD80,915	USD21,522	USD102,437

5) Japanese Experts:

4 Experts consist of 2 long term Experts for 1 HIV Control position and 2 short term Experts for Testing Quality Assurance and Data Management/ STI Managementhad been assigned with 20 M/M in total until the end of August 2013.

6) Number of Myanmar trainees attended in training in Thailand:

5 from MOH including 4 NAP staff

7) Type of equipment provided to the Project:

Total amount of USD23,192 was spend for procurement of laboratory equipment and consumables for NEQAS and Blood safety including ELISA (enzyme-linked immune-sorbent assay) Washer and Reader, and renovation of the practical room for training. STI drugs are also procured up to 2012.

(2) Inputs by Myanmar Side:

1) Inputs for ensuring blood safety, EQAS Activities, Joint Supervisory visit, and Trainings:

- Relevant counterpart personnel including responsible personnel for the Component activities has been assigned,
- Cost for activities related to donor recruitment for blood safety program.
- Cost for NEQAS activities other than reagents including postal charges for sample and report sending.
- Panel characterization and preparation
- Results analysis and report development
- Multiplier training cost for STI Syndromic Management
- HIV and Syphilis test kits and other necessary consumables for Safe Blood, VCCT, and NEQAS activities.

3-2-2 Achievement of the Component

(1) Overall Goal

Since the Overall Goal specified as "Transmission of HIV and syphilis due to blood transfusion is prevented at low level" which is planned to be measured by the Indicator "National prevalence shows a downward trend" is expected to be realized after 3- 5 years after the completion of the Project, this timing at the Mid-Term Review is too early to discuss its achievement.

(2) Project Purpose

The Project Purpose of "National AIDS Program is strengthened for preventing HIV transmission through blood transfusion in collaboration with NHL and NBC, and for managing data" is to be measured by the Indicators targeting "Prevalence of HIV and Syphilis of the donated blood show a downward trend in project areas 1) from 0.6% in 2010 to 0.4% in 2015 on HIV, and 2) from 0.8% to 0.6% on syphilis".

The HIV and Syphilis screening positive rates were 0.2% and 0.3% respectively among donated blood in 2012 and both showed a downtrend.

(3) Outputs

1) Output 1

The Output 1 of "Safe blood donation is enhanced" is to be measured by the Indicator "Number of BTS unit adopting SOP on blood safety guideline will increase from 160 in 2011 to 280 in 2015".

As of June 2013 228 BTS units have adopted SOP against the target number of 280. It means more than half (68 / 120) of the entire increase has achieved slightly before the mid-term. This implies the achievement of the Output 1 is duly expectable.

However, the Team found the space for improvement of data management in BTS units such as standardization of reporting format and database in General and Specialist Hospitals.

2) Output 2

The Output 2 of "Quality of screening of HIV and syphilis on donated blood is ensured" is to be measured by the Indicators "Number of laboratories under NEQAS" and "False test results (false positive or negative rates) of NEQAS on HIV and syphilis will be maintained at low level; such as between 5% and 10%".

Number of laboratories under HIV-NEQAS is 350 among approximately 400. False test results occurred in 5 to 10 % laboratories under NEQAS. The number of participated laboratory reached nearly 90% of the eligible laboratories, and geographically stretched nationwide. Considering the distances and the access conditions, NEQAS coverage reached to the satisfactory level. Moreover, NHL could keep more than 90% reporting rate despite NEQAS has been expanded rapidly in a short time. HIV NEQAS covers nearly 100% of hospital based PMTCT, 100% of major VCCT and nearly 100% of Blood donor screening site.

Number of laboratories participated to Syphilis EQAS by the Mid-term is 70 for Qualitative out of approximately 400 laboratories conducting qualitative testing and 69 for Quantitative out of 72 laboratories conducting quantitative testing. Rate of the laboratories failed to pass the NEQAS for Syphilis testing ranged from 30% to 40 % for Qualitative and 10% to 20% for Quantitative. Since NEQAS for Syphilis testing is still

in the introduction phase, the effort should be put not only in increasing the coverage but also in improving the quality of testing. The publication of Guidelines on National External Quality Assurance System for Syphilis testing could contribute to improve the quality of testing.

The above means the HIV part of Output 2 has achieved, while the Syphilis part is still on the way for achievement.

3) Output 3

The Output 3 of "Capacity of data management and analysis on HIV/AIDS control activities is improved" is planned to be measured by the Indicators "Annual reports on blood safety for HIV control are published." and "Annual reports which compile data of testing quality assurance on HIV and syphilis are published".

By publishing of "Annual Report Blood Safety, Myanmar 2012" by NBC in March 2013 and "Annual Report on National External Quality Assurance Scheme for HIV Antibody Testing and Syphilis Antibody Testing, National Health Laboratory 2012" by NHL in March 2013 the Output 3 has achieved.

In addition, The TOT training for STI Syndromic Management has been conducted for the participants from the 314 Townships (Out of those, trainings in 167 townships were supported by the project). The participants supposed to provide multiplier training for Basic Health Staff (BHS), and the Team found that multiplier training had been conducted in townships using Continuous Medical Education (CME) session in Mandalay, Bago and Nay Pyi Taw.

(4) Activities

1) Activities for Output 1

Activities 1.1: Trainings for Introducing SOP for Blood Transfusion Service were conducted in Mon, Chin, and Shan North States for respective TMO, BTS staff and AIDS/ STD Team staff during 15 - 16 in August in Mon State and 17 - 18 in October, 2012 in Chin State, May 2013 in Shan North State.

Activities 1.2: Annual review meeting was conducted during 18 - 19 December, 2012 with 37 medical doctors from 34 major BTS units nationwide. Supervisory visit for BTS

units were jointly conducted with NEQAS supervisory visit to the participated laboratories by NHL under Activity 2.3. Upgrading of the database for blood safety is ongoing.

Activities 1.3: NBC newsletter issue 3 for raising awareness of importance of blood donation among community people including donor groups were published for advocating activities, while the advocacy meeting on blood safety was postponed to FY 2013/ 14. Currently, member of Parliament formulated the committee for Blood safety to enact a set of Blood Safety Bills. NBC planned to conduct advocacy meeting using the occasion of launching the result of this committee.

Activities 1.4: HIV test kits together with HBV/ HCV/ Syphilis/ Malaria total 300,000 tests were procured in FY 2013/14 by the Government of Myanmar.

2) Activities for Output 2

Activities 2.1: Refresher trainings on NEQAS for HIV Testing were conducted in November 2012, and June 2013. Bi-annual HIV Testing EQAS panel 15 and 16 were complete in 2012, and panel 17 is ongoing in 2013.

Activities 2.2.1: The trainings on NEQAS on Syphilis testing were conducted in June 2012, July 2012, and Jun 2013 with the participants from General and Specialist Hospitals, and AIDS/ STD Clinics with STI laboratories. Bi-annual Syphilis testing EQAS Panel 1 to 3 has been conducted as of August 2013.

Activities 2.2.2: The Guidelines on NEQAS for Syphilis Testing were planned to publish in FY 2013/14, based on the experiences of the EQAS panel 1 to 4.

Activities 2.3: Joint Supervisory visits were conducted in; 1) 9 laboratories in Mandalay Region during 9 - 13 July 2012, 2) 7 laboratories in Mandalay Region during 19 - 23 November 2012, 3) 4 laboratories in Thanintaryi Region during 12 - 15 February 2013, 4) 3 laboratories in Mandalay Region during 25 - 27 February 2013, 4) 7 laboratories in Yangon Region during 28 February – 1 March 2013, 5) 8 laboratories in Southern Shan State during 8-11 July 2013.

Activities 2.4: ELISA (Enzyme-Linked Immune-sorbent Assay) Washer and Reader

were installed in Mandalay General Hospital Blood Bank for the upgrading of testing, in FY2012/13.

3) Activities for Output 3

3.1: Pre-service training for newly recruited AIDS/ STD Team staff was conducted during 3 - 5 October 2012 with 14 staffs including 2 Team Leaders.

3.2: Training on supply management database management was conducted in August 2012 with 13 AIDS/ STD team participants, which complies 7 currently assigned personals and 6 candidates for supply management of HIV testing kit.GIS training was conducted in 7-10 January 2013 with the 17 participants form NAP, NHL and NBC.

3.3: Based on the situation and needs survey and analyses, STI Syndromic Management TOT Trainings were conducted during 28 - 29 January in Mon State with 27 participants from 10 Township Hospitals, AIDS/ STD Teams, and the General Hospitals, 12 - 15 February 2013 in Taninthayi Region with 23 participants from 10 Township Hospitals, AIDS/ STD Teams, and the General Hospital in 2012, 25-26 July 2013 in Bago region with 58 Participants, and 26 – 27 August 2013 in Ayeyawaddy Region with 56 participants.

3.4: Third country training, "The Observation Visit in Bangkok for Myanmar AIDS/SRDs Team Officers", was conducted during 13 - 26 January 2013 with 5 participants at Mahidol University in Thailand. The training was very helpful, while the contents revealed partly overlapped with other training session.

3-3 TB Component

3-3-1 Inputs

(1) Local Costs and Inputs by Japanese Side

1) Local Cost

Until July2013 USD167,403 had been allocated by Japan side for the Project operations as following amounts in FY 2012/13 and 2013/14. It covered the costs for the supplies and necessary expenses for pilot projects and experimental activities including hiring costs of Supervisory Staff, and EQA activities and its annual report preparations.

	FY 2012/13	FY 2013/14 until July	Total
Local Cost	USD125,033	USD42,370	USD167,403

2) Japanese Experts:

7 Experts consist of 1 long term Expert post for TB Control and 6 short term Experts for Component Leader/ TB Control, Testing Quality Assurance, Community DOTS, X-ray Machine Operation, and Epidemiological Statistics/ TB Control had been assigned with 20 M/M in total until the end of August 2013.

3) Type of equipment and supplies provided to the Project:

Total amount of USD80,000 was spent for procurement of 2 computerized radiography machines for Chest X-ray examination capacity enhancement.

(2) Inputs by Myanmar Side:

1) Inputs for Office Expenses

- Office space in Latha TB Centre in Yangon
- Office furniture (desks, chairs, shelves)
- Utility costs (water, electricity, etc.)
- Maintenance cost for the office space

2) Inputs for the Implementation of Pilot Projects and Experimental Activities, EQAS activities and

3) Its Annual Report Preparation, X-Ray Machine Procurement, and Trainings:

- Relevant counterpart personnel including 1) NTP officer, medical superintendent, township medical officer, TB team leader for pilot project and experimental activity design and modification, 2) NTP officers, medical superintendent, Township medical officers, TB team leaders, medical officer, TB coordinators, BHS, public health supervisors, laboratory technicians for the pilot projects and experimental activities, 3)NTP staff, microbiologists, senior laboratory technician, (senior laboratory supervisor: STLS, and /controller), microscopists for EQA activities and its annual reports preparatory works

- Training Venues

3-3-2 Achievement of the Component

(1) Overall Goal

Since the Overall Goal specified as "To halt and reverse the TB incidence by the year 2015" which is planned to be measured by the Indicator "Number of new smear positive TB is detected from 41,400 in 2010 to 44,551 in 2015" doesn't seem to match the current situation because the notification rates of new smear-positive TB has already slowly declined due to the efforts made by the NTP.

Two substituting Indicators are sassigned: "New smear positive TB detected is maintained" and "Case notification rate (all forms of TB) is increased up to 2015 and shows a downward trend".

Aside from the above, since the Overall Goal is expected to be realized 3 - 5 years after the completion of the Project this timing at the Mid-Term Review is too early to discuss its achievement.

(2) Project Purpose

The Project Purpose of "TB Control in Yangon and Mandalay Regions is improved" is to be measured by the Indicators "Case Detection Rate (CDR) > 70% and Treatment Success Rate (TSR) > 85% are achieved or sustained in Yangon and Mandalay Regions by year 2015", "No. of new smear positive TB detected in target areas (8,329 in Yangon, 3,360 in Mandalay in 2010 to 8,880 in Yangon, 3,582 in Mandalay in 2015)", and No. of guidelines which is approved by Ministry of Health in Myanmar".

The designated Indicators are not appropriate for measuring the Project Purpose considering its basic nature of a vehicle for pilot project and experimental activity implementation with key equipment provision and key trainings while the Indicators measure part of the NTP's entire performance.

In this connection the new Indicators of "1.More than 70% in Case Detection Rate (CDR) and more than 85% in Treatment Success Rate (TSR) are achieved or sustained in implementing townships by year 2015", "2.Case detection in implementing townships by Drug Seller Referral is increased by 5%", "3.Case detection in implementing

townships by CBTBC is increased by 5%", and "4.TB suspect examination in implementing townships in Yangon and Mandalay Regions is increased by 10%" have been assigned for the measurement of the attainment of the Project Purpose.

The TB control activities utilizing the guidelines are planned. At this point of pre-commencement in full scale guideline utilize implementation, it is difficult to expect properly the attainment though the implementation is duly expected.

(3) Outputs

1) Output 1

The Output 1 of "Capacity for program management and data management for TB control is strengthened" is planned to be measured by the Indicators "No. of abstracts on the operational researches approved and presented at the Union Conference", "Achievement is presented with GIS tool at the Regional evaluation meetings by Regional TB officers", "EQA annual report is published", and "The protocol for repeat nationwide TB prevalence survey is developed".

The designated Indicators for the Output 1 do not represent the meaningful facts caused by the attainment of the Output 1. They rather indicate proper achievements of the respective Activities. For the reason the new Indicators of "10 Townships utilizing the developed guidelines to expand the related activities" and "90% of the laboratories with no major error on quarterly basis utilizing EQA annual report" are to be placed as the Indicators.

For the first indicator, although the guidelines are in process NTP plans to utilize the Guideline for Community Based TB Control for implementing 156 GF supported Townships and 5 to 10 Townships for Drug Seller Referral (PPM) projects under 3MDGF which means the achievement is duly expected. For the second Indicator current national level of 84 - 88% laboratories with no major error suggests the due expectation of the achievement.

2) Output 2

The Output 2 of "Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with Stop TB Strategy" is to be measured by the Indicators "Four

out of five laboratories at station hospitals without major error", "No. of referred TB suspects by the drug sellers", "Case detection in the pilot area is increased by 10% with the support of drug sellers", "No. of referred TB suspects by the trained community volunteers", "Case detection in the pilot area is increased by 10% with support of Community Based TB Care", and "Community Based TB Care guideline is developed".

The designated Indicators for the Output 2 although NTP used the above Indicators other new meaningful Indicators will be recommended to be initiated as follows: "90% of the laboratories with no major error on quarterly basis through utilizing EQA annual report in Station Hospitals", "TB suspect examination by drug sellers in the project areas is increased by 10%", "TB suspect examination by community volunteers in project areas is increased by 5%", "Case detection by drug sellers in the project areas is increased by 3.2%", and "Case detection by community volunteers in the project areas is increased by 3.2%". They are to be placed as the Indicators.

In 2012 4 out of 5 Station Hospital laboratories had no major error.

TB suspects in the Hlaing Township project showed high performance more than 60% increase. Case detected by the drug seller referral showed 30% increase.

The results of CBTBC in Nay Pyi Taw Pyinmana Township showed 2.8% in TB suspect increased and 5.8% increase in case detection.

The above Indicators' results imply that the increase in TB suspects and cases detected in adopted areas for CBTBC and Drug Seller Referral is expectable although increases by CBTBC is rather moderate. It is noted, however, that the Hlaing Township's number of participated drug sellers exceeds 100 which are exceptionally large in quantity in case of Drug Seller Referral. Moderate increase comparing with the project might be the adopted Townships for Drug Seller Referral. Long term monitoring is required to assess the CBTBC performance and its progresses.

(4) Activities

1) Activities for Output 1

Activities to prepare the guideline for Community Based TB Control have conducted

with JICA support in pilot project design and implementation, and guideline preparation. Site inspections and following advisory to NTP for guideline preparation was conducted by Dr. Ishikawa in June and October 2012 and February 2013. The guideline "COMMUNITY BASED TB CARE to increase access to quality DOTS Service" is final draft stage at the mid-term.

Training on GIS system was conducted during 24 - 27 October, 2012 in Nay Pyi Taw with participants from 30 NTP staffs who were beginners in using GIS. The training was conducted by using standard software in the sector "Health Mapper" for learning basic software use up to importation of existing data for mapped presentation.

2 computerized X-ray machines were installed in December 2012 while the training for the chest radiophotography operation was provided in September 2012.

Preparation of EQA annual reports is planned to be conducted for FY 2012/13, 2013/14, and 2014/15 during the Project period. Among them the report for FY 2013/14 is final draft stage while the preparatory works on the one for FY 2012/13 has just commenced at the mid-term. Training on the florescent binoculars examination was conducted in June with 21 participants.

Among the Activities shown on the current version of PDM, Activities for <Advocacy, Communication and Social Mobilization> which are "1.6 Develop and distribute IEC (Information, Education, Communication) materials on patient management for health staff and on basic TB knowledge for TB patients", "1.7 Conduct World TB Day activity to raise awareness on TB", and "1.8Conduct advocacy meeting with journalists and famous authors" have been transferred to the other development partner(s)'s activities. The transfer was conducted due to the drastically improved availability in development partner(s)'s supports aiming the effective resource utilization by activity focusing in accordance with the Project nature of a vehicle for pilot project and experimental activity implementation with key equipment provision and key trainings.

2) Activities for Output 2

As described in 1) pilot project for the Community Based TB Control have conducted with JICA support in pilot project design and implementation as an ongoing project.

Model activities of improved accessibility for sputum smear microscopy services at Station Hospital are ongoing. The Phase 2 activities started with Senior TB Laboratory Supervisor supervision of the Station Hospitals in 3 Townships of Kyatiya, Letkotekone, and Taikkyi in Yangon Region. The Sputum Collection Center Trainings were conducted in early stages and commencement of sputum smear testing at 2 Station Hospitals in Mandalay Division followed. Counseling trainings for BHS were conducted in Mandalay Region with 20 BHS participants in July 2012 and Yangon Region with 44 BHS participants in August 2012.As the Activity of model activities for improved accessibility support for the mobile team for hard-to-reach area has continued.

Piloting activities for Drug Seller Referral (PPM) have entered to 2nd stage to expand from an initial model Township to additional 2 Townships. JICA support has extended from preparation and conducting of initial advocacy meetings and trainings in collaboration with NTP to hire supervisory staff for facilitating referral activities.

Activities for enhancing coordination/ collaboration with entities conducting TB control through Regional TB Evaluation Meetings M&E enhancement have been conducted. Township TB Quarterly Meetings have been conducted for enhancement of M&E, improvement in case detection and case holding together with the stakeholders.

Among the Activities shown on the current version of PDM, Activity of "2.2 Arrange study tour for staff in charge of sputum smear microscopy from selected station hospitals to learn routine service at township laboratories" is not conducted by NTP's judgment for effective use in resources.

In addition Activity for <Training> "2.12 Conduct training related to the activities in line with Stop TB Strategy eg. TB/HIV, chest X-ray, counseling etc." has shifted to the Activities for Output 1.

3-3-3 Implementation Process

The Component has been working in close collaboration with the counterparts including Lower Myanmar TB Center and Upper Myanmar TB Center using various communication measures such as email, mobile phone or facsimile. In the field, the Component conducted joint monitoring and evaluation during the implementation,

involving the respective TMO and township staff. In the process of developing the guidelines, face-to face discussion function well.

3-4 MLR Component

3-4-1 Inputs

(1) Local Costs and Inputs by Japanese Side

1) Local Cost

Until July2013 USD258,357 had been allocated by Japan side for the Component operations as following amounts in FY 2012/13 and 2013/14. It covered the costs for the supplies and necessary expenses for pilot projects and experimental activities for community based malaria control activities in Bago Region as a pilot project, survey and analyses with resulting guideline preparation for Myanmar Artemisinin Resistance Containment (MARC) Project enhancement, activities for strengthening malaria and other vector borne disease control program management including trainings and operational/ applied field researches, and dissemination activities including attending in country meeting such as Technical and Strategic Group (TSG), regional and international meetings/ conferences, and holding seminars and workshops.

	FY 2012/13	FY 2013/14 until July	Total
Local Cost	USD197,098	USD61,259	USD258,357

2) Japanese Experts:

4 Experts consist of 1 long term Expert for Malaria Control post and 3 short term Experts for Program Quality Improvement, Medical Anthropology, and Testing Quality Assurance had been assigned with 20 M/M in total until the end of August 2013.

3) Type of equipment and supplies provided to the Project:

Total amount of USD370,069 had been spent for the procurement of1) equipment and supplies for implementing the pilot project including Malaria test kits, micro pipettes and their supplies, medicines, long lasting insecticidal nets, and spraying machines, 2) GIS software and computers, and 3) microscopes and supplies of Giemsa Stain

4) Renovation of entomology laboratory in VBDC (Vector Borne Disease Control) central

office Yangon Branch:

Entomology laboratory insectarium and lecture room were renovated and essential equipment were installed.

(2) Myanmar Side:

1) Inputs for Office Expenses

- 1 large room and 2 store rooms in VBDC Office in Yangon
- Office furniture (desks, chairs, shelves)
- Utility costs (water, electricity etc.)
- Maintenance cost for the office space

2) Inputs for the Implementation of the Pilot Project, MARC Enhancement:

- Relevant counterpart personnel including team leader, officers and staffor implementing the pilot project in Bago, officers relating to the MARC Project enhancement activities, officers relating to conduct operational/ applied field researches and trainings, and officers collaborating for the dissemination activities.
- Training Venues
- Working Spaces for the Activities

3-4-2 Implementation Process

The Component has been working in collaboration with VBDC and NMCP from the discussion on the issues and planning until implementation and M&E with associating improvement. The Component's involvement from the issue discussion and planning resulted in proper gap filling for the Myanmar side and precise fitting of the provided support with the Myanmar side needs.

Wider and deep involvement of Myanmar Side personnel beyond the framework of the counterpart provided precious opportunity for the personnel to receive on-the-job training.

Supports for strengthening entomology capacity and pioneering use of GIS in the sector provided experiences of advanced and pragmatic knowledge and technology. The

experiences promoted the motivation for further acquisition ofadvanced practical technologies and know-how and broader skilled personnel in Township level.

3-4-3 Achievement of the Component

(1) Overall Goal

Since the Overall Goal specified as "National Malaria Control Program is strengthened nationwide" which is planned to be measured by the Indicators "No. of malaria patients diagnosed and treated at health facilities shows upward trend" and "No. of malaria in-patients, severe and complicated cases and malaria death in 2010 is halved to22,000, 3500, and 400, respectively, by 2015".

It is agreed by both sides to substitute the Indicators with the following ones: "No. of malaria patients examined and treated shows downward trend" and "Declining trend of malaria deaths No. of continues".

Since Overall Goal is, however, expected to be realized after 3 - 5 years after the completion of the Project, this timing at the Mid-Term Review is too early to discuss its achievement.

(2) Project Purpose

The Project Purpose of "Implementation/ monitoring capability of National Malaria Control Program is improved in the Target area" is to be measured by the Indicators "No. of evidences and findings from the Project to strengthen NMCP", "No, of malaria examined and confirmed cases in Bago Region shows upward trend", and "No. of malaria in-patients, severe and complicated cases and malaria deaths in 2010 is 30% reduces by 2015 in Bago region".

The designated Indicators are not appropriate for measuring the Project Purpose attainment. Especially the second and the third Indicators seem to be appropriate for measuring the Output 2. It is suggested to replace the Indicators to signify the meaningful conditions reflecting the Project Purpose attainment.

The Indicators are agreed to be substituted by "Full scale implementation of community based Malaria control activities in hard to reach areas developed by the Project has commenced".

According to the Indicator the level of the Project Purpose attainment at the mid-term is reaching to the attainment since the community based Malaria control activities in hard-to reach is recognized by NMCP as effective and efficient approach.

(3) Outputs

1) Output 1

The Output 1 of "Myanmar Artemisinin Resistance Containment (MARC) Project is strengthened in the MARC area" is planned to be measured by the Indicator "No. of malaria diagnosis and treatment in 14 Townships of East Bago shows upward trend in 2015" and "No. of facts and findings to be utilized to strengthen the MARC project based on the project activities such as operational researches".

The designated Indicators for the Output 1 do not represent the meaningful facts caused by the attainment of the Output 1. They rather indicate proper achievements of the respective Activities. For the reason the new Indicator of "11 Townships among 51 Townships embracing MARC Tier 1 and 2 implement Malaria Control Program with CHW system in hard-to-reach areas in Bago Region and Kayin State" is agreed as the alternative.

For the Indicator 9 townships (9/11=82%) are implementing the CHW system in hard-to-reach areas. In order to improve the system, contentious monitoring is conducting.

2) Output 2

The Output 2 of "Community based malaria control is effectively conducted in Bago Region" is to be measured by the Indicator "No. of facts and findings from operational researches and monitoring are utilized to improve the program", "No. of remote communities having access to confirmatory diagnosis and proper treatment in accordance with National Treatment Guidelines by CHW (Community Health Worker) (Target: 800 communities in 20 targeted Townships in Bago Region)", "No. of components of community based malaria control adopted into National Program's manual or guideline etc.", "No. of reports and annual plans submitted from targeted Townships to Regional VBDC from 14 Townships (50%) in 2010 to 28 Townships (100%) in 2015", and "No. of technical support to Target State/ Region/ Township level

based on the result of monitoring".

They do not represent the meaning facts caused by the attainment of the Output 2 and rather indicate proper achievements of the respective Activities. For the reason the new Indicators of "All 8 Townships eligible for ordinary Malaria Control Program implement and continue Program with CHW System in west part of Bago Region" is agreed to replace them.

For the Indicator, the CHW system is implemented in 8 townships (100%) which means the Output is almost achieved.

3) Output 3

The Output 3 of "Capability of program management in different levels of malaria and other vector borne diseases are strengthened nationwide" is to be measured by the Indicator "No of State/ Region VBDC (Vector Borne Disease Control) teams utilized GIS for implementation and documentation (Target 17 States/ Regions)", "No. of facts and findings from operational researches are utilized to improve the program", and "No. of database developed, modified and utilized".

They do not represent the meaning facts caused by the attainment of the Output 3 and rather indicate proper achievements of the respective Activities. For the reason the new Indicators of "All Regions/ States utilize GIS for documentation and data analysis" and "4 newly developed databases are utilized for program improvement" are agreed to be assigned as the Indicators.

For the first Indicator, all Regions and State utilizing GIS for documentation and presentation. Data analysis by GIS is expected to be operationalized within the project period. For the second Indicator, 3 databases of "Database for Monitoring of CHW Activities", "Database of CHW individual data", and "Database of Dengue Weekly Report" have been developed.

4) Output 4

The Output 4 of "Outcomes from the Project are utilized among the partner for further strengthening of National Malaria Control Program" is to be measured by the Indicator "No. of outcomes were shared, recognized and utilized among the partners".

They do not represent the meaning facts caused by the attainment of the Output 4 and rather indicate proper achievements of the respective Activities. For the reason the new Indicator of "Quantity of the project outcomes shared, published and utilized among the partners" is agreed to replace them.

For the first indicator, "Accomplishment Report on Malaria Control Program in Bago, Magway Regions and Rakhine State" (2012, 89p.) and "Accomplishment Report on Malaria Control Program in Bago, Magway Regions and Rakhine State in 2010 and 2011" (2012, 700p.) were published and distributed among the partners. More than 20 times presentations were made out of 53 times participation of various meetings and conferences.

(4) Activities

1) Activities for Output 1

Activities for basic analysis to develop Myanmar Artemisinin Resistance Containment Project are ongoing. Guideline on Malaria Control Measures for Migrant Population and Mapping of Population Migration and Malaria in South Eastern Region of Myanmar were published based on the surveys and analyses conducted by the Project as joint product by IOM, WHO , DOH and JICA. An implementation of a pilot project for MARC Project modeling has agreed to be conducted in Hlaing Bwe Township in Kayin State from August2013.

The model development activities include attending the international and domestic meetings for MARC including TSG and MARC review meetings, trainings further to the operation/ applied field research.

2) Activities for Output 2

The community based Malaria control model project has been conducted in Bago Region as designed since November 2011. It includes employment of directly controlled and directly supplied CHWs by TMO, involvement of private and other sector entities as CHW affording bodies further to communities, involvement of administrative entities down from Township level to Village level.

The pilot project coverage extended to17 eligible Townships where malaria transmission

is existing, which include Townships with MARC tier 1and 2, for Malaria control in Bago Region which consists of 28 Townships. As recognition among the stakeholders including TMOs rose by dissemination and mobilization efforts including advocacy meetings, number of the participating Townships increased.

3) Activities for Output 3

Promulgation activities on relational database and GIS for improved program management including trainings and database development supported community based malaria control have been conducted. Entomology Training was conducted in cooperation with WHO and US CDC as recognition of the importance of the entomological aspects for National Malaria Control Program.

4) Activities for Output 4

Activities to disseminate project results and findings and to promote collaborative/ coordinated action of development partners have been conducted vigorously.

Activities includes active participations in coordination meetings including TSG with/ among development partners such as WHO, GF, 3MDGF, USAID, and other implementing partners, and international meetings/ conferences on Malaria control including MARC related meetings. Attended meetings were more than50 times since the project started.

4. Review Results

As for the same reason as the previous chapter for the Project Performance, Review Results are stated in the Component by Component basis.

4-1 HIV/ AIDS Component

4-1-1 Relevance

(1) Basic Relevance

Conditions regarding the relevance such as the National Policy, prevalence, the supporting policy of Japan toward Myanmar, have not changed significantly from the time of the Project preparation and commencement, while activities of the development

partners, INGOs and funds have substantially increased.

The relevance of the Component with the national policy is evident, since HIV/ AIDS and STD including Syphilis consist a part of major infectious disease in National Health Plan 2011-2015. In order for attaining the National Health Plan, National AIDS/ STD Program (NAP) under the division of Disease Control developed the Myanmar National Strategic Plan on HIV and AIDS 2011-2015.

The Strategic Plan has 3 Strategic Priorities and Cross Cutting Interventions. Blood safety, early and effective treatment of STI by introduction of STI syndromic management, and NEQAS for HIV and other blood born disease are important component of the strategic plan.

(2) Internal Relevance

Output 1 (safe blood donation enhancement), Output 2 (quality screening ensuring in HIV and syphilis), and Output 3 (data management and analysis improvement) contribute in attainment of the Project Purpose.

4-1-2 Efficiency

Inputs have been provided appropriately and timely to conduct the activities.

4-1-3 Impact

The attainment of the Project Purpose is duly expected to contribute in realization of the Overall Goal.

As a positive impact extended adoption of NEQAS by other testing categories.

4-1-4 Sustainability

Technical sustainability of activities related to Output 1 and Output 2 is reasonably expected. However, financial sustainability is not guaranteed due to less attentions are paid to the cross cutting issues including Blood safety and NEQAS.

4-1-5 Conclusion

The Outputs for HIV/ AIDS Component is effective in attaining the Project Purpose considering the achievement level of the 3 Outputs of "Safe blood donation is enhanced", "Quality of screening of HIV and syphilis on donated blood is ensured", and

"Capacity of data management and analysis on HIV/AIDS control activities is improved".

4-2 TB Component

4-2-1 Relevance

(1) Basic Relevance

Conditions regarding the relevance such as the National Policy, prevalence, the supporting policy of Japan toward Myanmar, have not changed significantly from the time of the Project preparation and commencement, while activities of the development partners, INGOs and funds have increased substantially increased as the new government of Myanmar has implemented its reforming policies in various fields.

It complies with the NTP's needs for piloting and experimental activity implementation which have less conformity with project/ program implementation oriented nature of funds and other developing partners' cooperation.

In addition the targeted areas of Yangon and Mandalay Regions are the 2 most populated areas in Myanmar. They are highly affected area by TB where involve wider range of community settings including urban poor areas, peripheral urban

(2) Internal Relevance

As the structure and role of the Project had significantly changed from the Phase 1 period due to the presence of massive support inflow by new development partners in the field. The Component has been functioned as a vehicle for pioneering model establishment for national proliferation of the model and experimental activities for proving although the Indicators for the Project Purpose do not reflect the functions properly.

This change, which was caused by drastic improvement in external resource availability formed due to massive assistance inflow, seems to result in Activities shown in the PDM which provides fragmented impression and distanced relationship between Outputs' results, and in Indicators of the Project Purpose shown in the PDM corresponding to the NTP's targets instead of NTP project's ones.

4-2-2 Effectiveness

Considering the intended Project Purpose as the vehicle for model project/ activity implementation and proving/ establishment, the component may attain its intended purpose by the achievement of the Outputs.

4-2-3 Efficiency

Inputs are arranged to be available at the appropriate manner and timing for implementing the activities.

4-2-4 Impact

The attainment of the intended Project Purpose is duly expected to contribute in realization of the Overall Goal.

Although the attained Project Purpose is relatively small in scale, its nature of national proliferation model development may deliver large scale impact on the tuberculosis related activities in Myanmar.

4-2-5 Sustainability

The Sustainability of the Project result has to be measured by the view point of proliferation of the model(s) and experimental activities.

Since NTP is committed for the proliferation and current conditions of resource availability sustainability of the Project result is duly expected.

4-2-6 Conclusion

The guidelines for CBTBC is final draft stage and for Drug Seller Referral is under preparation while EQA strengthening has been steadily conducted. NTP is committed to apply the guidelines for implementation of projects under GF, 3MDGF, other development partners, and INGOs/ NGOs. Considering the above mentioned situation, the Component is on the way to attain its intended Project Purpose with expected contribution in realizing Overall Goal.

4-3 MLR Component

4-3-1 Relevance

(1) Basic Relevance

Conditions regarding the relevance such as the National Policy, prevalence, the

supporting policy of Japan toward Myanmar, have not changed significantly from the time of the Project preparation and commencement, while activities of the development partners, INGOs and funds have increased substantially increased as the new government of Myanmar has implemented its reforming policies in various fields.

The Component also comply with the emerging issue of intrusion of Artemisinin Resistance Malaria into Myanmar and with the needs of VBDP and NMCP in developing the effective and efficient implementation model for hard-to-reach area.

(2) Internal Relevance

Basic internal relevance of the Project is observed in the levels of "Project Purpose - Outputs" and "Outputs - Activities" while the respective Indicators do not show the meaningful aspects.

Inter-Output relationships among Activities of Outputs or inter-dependent nature of Activities beyond the Output category have resulted in synergy.

4-3-2 Effectiveness

The approach of the Component reflects intention to establish model activities/ project(s) through piloting and proving conducted by the Component. The Component focus much more for service delivery especially to the hard-to-reach areas reflecting the nature of the disease.

The attainment of the Project Purpose is duly expected by the achievement of the Outputs.

4-3-3 Efficiency

Inputs for the Component have been provided appropriately and timely. Since the model establishment process involves certain degree of tray and error the component is taking reasonable approach to pursue innovative Malaria Control activities including employment of direct control of and supply to CHWs who involve wide activities covering from detection to treatment together with advanced data management and analysis including use of GIS.

4-3-4 Impact

The attainment of the Project Purpose is duly expected to contribute in realization of the

Overall Goal.

Positive Impacts on Health Sector service delivery, and data management and analysis are observed. Innovative use of CHWs, which is shifting their direct control/ management and supply receiving from SRHC level to Township level, is employed by the pilot project in Bago Region. This approach reduces the BHSs' increasing burden of service delivery, control, and reporting. The approach has recognized as promising vehicle for multiple service delivery among Disease Control Division and Public Health Division.

The approach's involvement of local administrative organizations down from the Township level is also innovative in Myanmar where inter-Department activities a quire rare. Inclusion of the business and other sectoral entities as CHW provider is also exceptional.

Another positive impact is observed in the field of data management and analysis. Effective use of relational database and GIS employed by the component in advance is promulgated among disease control sector in Myanmar.

4-3-5 Sustainability

The Sustainability of the Project is also measured by promulgation of the model project/ activities, advanced systems proved by the component. Current expansion of recognition of new approach in CHW use and expanding employment of the advanced data management and analysis originated from the component imply due sustainability together with the current resource availability improvement in Myanmar.

4-3-6 Conclusion

The Project is on the due process to attain the Project Purpose with large positive impact and inappropriate Indicator set.

5. Recommendations and Lessons Learned

5-1 Recommendations

5-1-1 Recommendations for HIV/ AIDS Component

(1) Recommendation regarding Output 1

Training for introducing SOP for Blood Transfusion Service was successfully conducted in 11 State/Regions, while not yet conducted in six. The Team recommends the project conduct same training in the rest as much as possible.

The Team also recommends strengthening the activities for improving the data management in BTS units in General and Specialist Hospitals.

(2) Recommendation regarding Output 2

The NEQAS for HIV still needs to cover the decentralized HCT (HIV Counseling Testing) sites including rural health centers and sub-rural health centers.

Publication and dissemination of 'Guidelines on NEQAS for Syphilis Testing (temporary title)' are encouraged in order to provide standardized testing service in all public laboratories.

(3) Recommendation regarding Output 3

Objectives and output of 'Third country training' in Thailand should be re-considered to provide more useful opportunities for capacity development.

(4) Recommendation regarding General Issue

In order to contribute for the evidence-based policy making, the Team recommends the project to compile the successful achievement of the project activities such as ensuring the blood safety and establishment of the NEQAS. Strengthening the advocacies, conducting the operational research and dissemination of the project achievements are strongly encouraged.

The project should pay close attention to avoid implementing additional vertical program into HIV related activities. 'Guideline on Syphilis Testing for Diagnosis (temporary title)' and the NEQAS do not only focus on blood safety, which indicate the program is stepping to the right direction.

5-1-2 Recommendations for TB Component

(1) Recommendation regarding Output 1 and 2: Data Collection for Chest X-Ray Active Case Finding

For proving the effectiveness in active case finding through chest X-ray examination, the data such as the number of participants, screened cases, and detected cases is better be continuously accumulated for further improvement of case detection.

(2) Recommendation regarding Output 2: Station Hospital's Role in Accessibility Improvement

For assessing the experimental activities of Model of Improvement in Sputum Smear Microscopy Performance at Station Hospitals, detailed evaluation of the TB laboratory situation in the respective Station Hospitals is required.

(3) Recommendation regarding Output 2: Assessment of Community Based TB Care

Assessment on the Community Base TB Care may require qualitative evaluation for associating social factors in addition to the numbers of CHW referral earning increase.

In order to evaluate the effectiveness of the model developed in wider scope, analysis based on quantitative and/ or qualitative approach are required.

(4) Recommendation regarding Output 2: Broader Access Points for Patient

In the expanded areas by other fund, technical support is better to be given in order to obtain the same effectiveness of the model for CBTBC and drug sellers' referral

(5) Recommendation regarding Output1: Enhancement of EQA

Central EQA Unit has to be strengthened by recruiting the manpower and improving capacity building. EQA annual report should be utilized by stakeholders for improvement of TB laboratory services.

5-1-3 Recommendations for Malaria Component

(1) Recommendation regarding Output 2: Innovative Utilization of CHWs

The pilot project should be adopted to utilize this innovative CHW model, which has unique therapeutic characteristics.

To explore the unique role of CHWs in active health care management for other common disease among the community, with special emphasis on the "hard-to-reach" population.

(2) Recommendation regarding Output 3: Use of Database Management System

To apply the existing relation database management system (RDBMS) for planning and implementation of Sub-National Malaria Elimination Program requiring village level data set.

5-2 Lessons Learned

5-2-1 Lessons Learned for HIV/ AIDS Component

(1) Expansion of the Areas under NEQAS

The NEQAS system has been implemented and expanded in due process, although many other countries faced difficulty in establish the NEQAS. Strong commitment at every level, good recording and reporting, and effective supervisory visit may greatly contributed for successful implementation of NEQAS. The system could be theoretically applicable to other laboratory tests.

(2) Opportunities in CME

Since expansion of multiplier training is challenge in many other countries, and Myanmar`s way of conducting multiplier training using CME session by their own budget is very unique. The CME is regularly held at the General Hospitals, and offers valuable chances to train health staffs in lower levels.

5-2-2 Lessons Learned for TB Component

(1) Model development

6 keys to success in Community Based TB Care ; selection of community volunteers, attitude or concept of community volunteers ,supervision to activity ,coordination among local authority, health authority and volunteers, leadership by local authority and health authority ,support for volunteers' transportation.-Recognized and acknowledged by local authority and appreciation certificate given by health authority

(2) Unexpected Positive Impact by Pilot Projects

Referral system applied through CBTBC and Drug Seller reduces unnecessary expenses expected to be borne by vulnerable people for early TB case detection.

5-2-3 Lessons Learned for Malaria Component

(1) Role of Bilateral Technical Cooperation in Myanmar

JICA's approach of working together with the national program from planning, implementation and monitoring proved useful in manifold ways, such as: making strong partnership, finding true needs on the ground, transfer of technology, and development

of the capacity of the program staff. The entire procedure worked as OJT at various levels of the program structure.

(2) Model Making and Scaling Up

JICA's practice demonstrates sequence from model making, field trial, modification and scaling up. Involvement of local health system lead by the TMO was most crucial for rapid scaling up.

The CHW model, for example, was combined with supply system and reporting system as a package. The process of the model development was back up by field experience so that front-liners could serve without shortage of material and information.

Project Design Matrix (PDM), JICA Major Infectious Disease Control Project Phase 2, Myanmar (Version 2)

Date: 28 June, 2012

HIV/AIDS
Duration: 19 March 2012 – 18 March2015

Target Group: BTS staff and AIDS/STD officer
Target Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal - Health burden of HIV and syphilis infection is mitigated.			
Overall Goal - Transmission of HIV and syphilis due to blood transfusion is prevented at low level.	- National prevalence shows a downward trend.	- NAP Report - NBC data	
Project Purpose 1. National AIDS Program is strengthened for preventing HIV transmission through blood transfusion in collaboration with NHL and NBC, and for managing data.	1. Prevalence of HIV and Syphilis of the donated blood show a downward trend in project areas. 1.1. from 0.6% in 2010 to 0.4% in 2015 on HIV; 1.2. from 0.8% to 0.6% on syphilis.	- BTS unit data	- HIV/AIDS control by Myanmar side and other development partners progress. - HIV and syphilis infection except infection caused by blood transfusion does not increase very much. - Clinical use of blood is appropriate.
Outputs 1. Safe blood donation is enhanced. 2. Quality of screening of HIV and syphilis on donated blood is ensured. 3. Capacity of data management and analysis on HIV/AIDS control activities is improved.	1.1 Number of BTS unit adopting SOP on blood safety guideline will increase from 160 in 2011 to 280 in 2015. 2.1 Number of laboratories under NEQAS 2.2 False test results (false positive or negative rates) of NEQAS on HIV and syphilis will be maintained at low level; such as between 5% and 10%. 3.1 Annual reports on blood safety for HIV control are published. 3.2 Annual reports which compile data of testing quality assurance on HIV and syphilis are published.	- Reports from NAP, NBC, NHL - Project reports	

Activities 1.1 Train TMO, BTS (Blood Transfusion Service) staff and AIDS/STD officer for blood safety in focused States/Regions. 1.2 Monitor BTS by reporting system, review meetings and field visits. 1.3 Advocacy meeting for raising awareness of the importance of blood safety for HIV prevention among stakeholders. 1.4 Propose sustainable HIV test kit procurement measures 2.1 Train laboratory staff for NEQAS HIV testing. 2.2 Develop EQAS for syphilis testing. 2.2.1 Train laboratory staff for syphilis testing. 2.2.2 Develop guideline on syphilis testing and dissemination of the guideline. 2.3 Monitor the performance of laboratory staff and provide guidance to them by NHL and NAP. 2.4 Upgrade testing in NBC. 3.1 Conduct pre-service training for new AIDS/STD officials. 3.2 Train NAP officials including States/Regions AIDS/STD officers and team leaders for data management and analysis. 3.3 TOT for syndromic management of STI in the focused States/Regions. 3.4 Third country training	Inputs: <Japanese> - Experts 1. Chief Advisor 2. Project Coordinator 3. HIV/AIDS Control/Blood Safety 4. Quality Assurance for Laboratory Testing 5. Data Management - Supply and equipment HIV test kits, STI drugs, equipment for laboratory test or blood screening etc. - Training - Operational cost - Other necessary support <Myanmar> - National AIDS Program Office - Running costs - Necessary supply	- Change of personnel of the counterparts does not affect implementation of the Project. - Supply and distribution of reagents are sustained in all testing sites. Pre-conditions: - National HIV/AIDS control strategy is not changed. - International environment for supporting HIV control is not changed. - Allocation of necessary human resources by Counterpart institution for the Project is secured.

- abbreviations
  - HIV: Human Immunodeficiency Virus
  - AIDS: Acquired Immuno Deficiency Syndrome
  - NAP: National AIDS Program
  - NHL: National Health Laboratory
  - NBC: National Blood Center
  - BTS: Blood Transfusion Service
  - SOP: Standard Operational Procedure
  - EQAS: External Quality Assurance Scheme
  - NEQAS: National EQAS
  - TMO: Township Medical Offer
  - STD: Sexually Transmitted Disease
  - STI: Sexually Transmitted Infection
  - TOT: Training of Trainer

Project Design Matrix (PDM), JICA Major Infectious Diseases Control Project Phase 2, Myanmar (Version 2)

Date: 5 December, 2012

TB
Duration: 19 March, 2012 – 18 March, 2015

Target Group: Residents in Yangon & Mandalay Regions
Target Area: Yangon and Mandalay Regions

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal To halt and reverse the TB incidence by the year 2015	1.1 Number of new smear positive TB is detected from 41,400 in 2010 to 44,551 in 2015	NTP annual report	
Project Purpose TB Control in Yangon and Mandalay Regions is improved.	1.1 Case Detection Rate (CDR) > 70% and Treatment Success Rate (TSR) > 85% are achieved or sustained in Yangon and Mandalay Regions by year 2015 1.2 No. of new smear positive TB detected in target areas (8,329 in Yangon, 3,360 in Mandalay in 2010 to 8,880 in Yangon, 3582 in Mandalay in 2015) 1.3 No. of guideline which is approved by Ministry of Health in Myanmar	NTP annual report	-Political commitment for TB control is maintained. -TB control by Myanmar side and other development partners' progress.
Outputs 1. Capacity for program management and data management for TB control is strengthened 2. Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with Stop TB Strategy	1.1 No. of abstracts on the operational researches approved and presented at the Union Conference 1.2 Achievement is presented with GIS tool at the Regional evaluation meetings by Regional TB officers 1.3 EQA annual report is published 1.4 The protocol for repeat nationwide TB prevalence survey is developed 2.1 Four out of five laboratories at station hospitals without major error 2.2 No. of referred TB suspects by the drug sellers 2.3 Case detection in the pilot area is increased by 10% with the support of drug sellers 2.4 No. of referred TB suspects by the trained community volunteers 2.5 Case detection in the pilot area is increased by 10% with support of Community Based TB Care 2.6 Community Based TB Care guideline is developed	1.1 OR reports 1.2 NTP publication 1.3 NTP publication 1.4 NTP publication 1.5 Project Record 2.1 Project record 2.2 NTP publication 2.3 Project record 2.4 Project record 2.5 Project record 2.6 Project record 2.7 Project record 2.8 Project record	- Drug supply is sustained. - Vacant laboratory technicians' posts do not increase. -HIV prevalence remains stable
Activities <Operational Research> 1.1 Carry out operational researches <Monitoring &Evaluation> 1.2 Train on data and Information management such as GIS Training etc. 1.3 Improve data management system at National TB Reference Laboratory and regional TB laboratories.	Inputs <Japanese> Experts 1. Chief Advisor 2. Project Coordinator 3. TB control and prevention 4. Quality Assurance for smear sputum microscopy 5. Community Based TB Care		A lot of counterparts do not resign.

1.4 Organize TB meetings for Monitoring & Evaluation of township health department. (Regional TB Evaluation Meeting) 1.5 Carry out quarterly TB meetings at township level for further improvement of case finding and case holding. <Advocacy, Communication and Social Mobilization> 1.6 Develop and distribute IEC materials on patient management for health staff and on basic TB knowledge for TB patients. 1.7 Conduct World TB Day activity to raise awareness on TB. 1.8 Conduct advocacy meeting with journalists and famous authors. <Others> 1.9 Present survey results at the international conferences 1.10 Support for protocol development on Second Nationwide TB Prevalence Survey <Improving Case Finding > <Model of sputum smear microscopy at station hospitals> 2.1 Support supervision to station hospitals by regional level and district level supervisors (Senior TB Laboratory Supervisors). 2.2 Arrange study tour for staff in charge of sputum smear microscopy from selected station hospitals to learn routine service at township laboratories 2.3 Review model of sputum smear microscopy diagnosis at station hospitals and share experiences with other partners <Public Private Mix> 2.4 Organize advocacy meeting and train for drug sellers 2.5 Conduct partner's meeting on PPM including drug sellers at selected townships 2.6 Establish referral mechanism between drug sellers and NTP <Community Based TB Care> 2.7 Develop IEC materials and conduct advocacy events to raise awareness on TB 2.8 Develop Community Based TB Care guideline based on local experience 2.9 Train basic health staff (BHS) in selected communities 2.10 Support quarterly supervision to the communities by township medical officer and NTP 2.11 Review Community Based TB Care and share experiences with other partners <Training> 2.12 Conduct training related to the activities in line with Stop TB Strategy eg. TB/HIV, chest X-ray, counseling etc. <Active Case Finding using Mobile Team > 2.13 Support contact investigation 2.14 Organize mobile team activity in high risk groups, hard-to-reach areas, urban and peri- urban areas.	6. Epidemiology Supply and equipment (microscope, X-ray equipment etc.) Training/Conference Operational cost Other necessary support <Myanmar> Project office facilities NTP officers Necessary supply	Pre-conditions - Allocation of necessary human resources by Counterpart institution for the Project is secured. - National Tuberculosis control strategy is not changed. - International environment for supporting TB control is not changed.

* abbreviation
- TB:Tuberculosis

- NTP: National Tuberculosis Program
- DOTS: Directly Observed Treatment Short Course Chemotherapy
- GIS: Geographical Information System
- IEC: Information, Education, Communication
- SOP: Standard Operating Procedure

Project Design Matrix (PDM), JICA Major Infectious Disease Control Project Phase 2, Myanmar (Version 2)

Date: 28 June, 2012

Malaria Target Group: People and communities affected by malaria

Duration:** March, 2012 ~ ** March, 2015 Target Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal Economic burden of malaria is reduced.			
Overall Goal National Malaria Control Program is strengthened nationwide.	1.1 No. of malaria patients diagnosed and treated at health facilities shows upward trend. 1.2 No. of malaria in-patients, severe and complicated cases and malaria death in 2010 is halved to22,000, 3500, and 400, respectively, by 2015	National Malaria Control Program(NMCP) Report	
Project Purpose Implementation/monitoring capability of National Malaria Control Program is improved in the Target area.	1.1 No. of evidences and findings of the Project to strengthen NMCP. 1.2No. of malaria examined and confirmed cases in Bago Region shows upward trend. 1. 3 No. of malaria in-patients, severe and complicated cases and malaria death in 2010 is 30% reduced by 2015 in Bago Region	1.1Situation analysis report. 1.2 NMCP Report /Project record 1.3 NMCP Report (Hospital data)	- Political commitment of higher authorities is maintained. - Malaria control by Myanmar side and other development partner's progress. -Large scale epidemics not occur
outputs 1. Myanmar Artemisinin Resistance Containment (MARC) Project is strengthened in the MARC area. 2. Community based malaria control is effectively conducted in Bago Region. 3. Capability of program management at different levels of malaria and other vector borne diseases is strengthened nationwide. 4. Outcomes from the Project are effectively utilized among the partners for further strengthening of National Malaria Control Program	1.1 No. of malaria diagnosis and treatment in 14 townships of East Bago shows upward trend in 2015. 1.2 No. of facts and findings to be utilized to strengthen the MARC project based on the project activities such as operational researches. 2.1 No. of facts and findings from operational researches and monitoring are utilized to improve the program 2.2 No. of remote communities having access to confirmatory diagnosis and proper treatment in accordance with National Treatment Guideline by CHW (Target: 800 communities in 20 targeted townships in Bago Region) 2.3 No. of components of community based malaria control adopted into National Program's manual or guideline etc. 2.4 No. of reports and annual plans submitted from target townships to Regional VBDC from14 townships (50%) in 2010 to 28 townships (100%) in 2015. 2.5 No. of technical support to State/Region/Township level based on the result of monitoring 3.1 No. of States/Region VBDC teams utilizing GIS for implementation and documentation (Target 17 States and Regions) 3.2 No. of facts and findings from operational researches are utilized to improve the program 3.3 No. of database developed, modified and utilized. 4.1 No. of outcomes were shared, recognized and utilized among the partners.	1.1 NMCP annual and monthly reports 1.2 Project record 2.1 Project record 2.2 Project record 2.3 NMCP publication 2.4 Project record 2.5 Project record 3.1 Project record 3.2 Project record 3.3 Project record 4.1 Project record	-Large scale epidemics not occur in the project area

Activities 1.1 Conduct situation analysis of socio- behavioral aspect among migrant population 1.2 Conduct malaria survey including entomological aspect 1.3 Conduct training to different levels of health services. 1.4 Conduct training to other government and private sectors 1.5 Setup monitoring and evaluation system 1.6 Support to manage the existing GIS based information system 1.7Conduct required operational and applied field researches 1.8 Develop BCC materials and conduct BCC activities 2.1 Conduct and support continuous monitoring activities in Phase1 target area to evaluate the outcome of Japan Grant Aid support. 2.2 Conduct situation analysis to define epidemiological characters of malaria in Myanmar. 2.3 Develop effective malaria control strategies in hard-to-reach areas 2.4 Develop BCC materials and conduct BCC activities 2.5 Conduct training to other governmental and private sectors 2.6 Modify and disseminate GIS based information management system 2.7 Conduct required operational and applied field researches 3.1 Conduct GIS and relational database training for VBDC staff 3.2 Develop relational database for malaria and other vector borne diseases control program. 3.3 Develop relational database for analyzing malaria survey 3.4 Conduct required operational and applied field researches 3.5 Conduct workshop and seminar 4.1 Demonstrate and disseminate the outcome of the project through partnership in TSG and other meeting. 4.2 Hold seminar and workshop for demonstrating the outcome of the Project. 4.3 Conduct collaborative activities with partners	Inputs <Japanese> Experts 1. Chief Advisor 2. Project Coordinator 3. Malaria Control 4. Medical Anthropology 5. Quality Control on Malaria Diagnosis 6. Information Management 7. GIS Supply and Equipment (Malaria medicine, RDT, Antibody detection test kits, microscope, insecticide spray, LLIN (Long-Lasting Insecticidal Net) etc. Operational cost Training	Inputs <Myanmar> Project office facilities VBDC staffs under NMCP Available training facilities at different level Running cost (Water, Electricity *etc.*) Necessary supply	- Cooperation and collaboration with other sectors and partners related to Malaria control such as forestry department, etc. maintain. Pre-conditions - Assignment of necessary human resources by counterpart institution for technical cooperation is secured. - National Malaria control strategy is not changed.

* Abbreviation:
-GIS: Geographical Information System
-BCC: Behavior Change Communication
-VBDC: Vector Borne Disease Control
-TSG: Technical Strategy Group
-RDT: Rapid Diagnosis Test
-CHW: Community Health Worker

Annex 2 Schedule of Mid-term Review Mission

		Place/ Filed	Consultant	Leader	Adviser (HIV/AIDS)	Adviser (Malaria)	Cooperation Planning
2-Sep	Mon	NRT to Yangon					
3-Sep	Tue	Yangon	Meeting with exparts & staff (MIDCP office) [TB] Yangon: Pharmacy acttivities (Hlaing township)				
4-Sep	Wed	TB: Yangon	Latha TB centre PSI /USAID (TB)				
5-Sep	Thu	TB: Yangon region	AM : South Dagon PM : South Okkalappa				
6-Sep	Fri	TB: Yangon	Taikkyi T/S → Okkan SHU				
7-Sep	Sat						
8-Sep	Sun	MLR: Yangon	MLR Interview to Expert				
9-Sep	Mon	MLR: Pyay	Yangon→Pyay Pyay District Office , General hospital				
10-Sep	Tue	MLR: Pyay	Pyay→Kaukkhaung T/S hospital→Tangle Station Hospital				
11-Sep	Wed	MLR: Pyay	Pyay→Yangon				
12-Sep	Thu	HIV: Yangon	NBC, NHL Interview to Japanese exparts & CPs				
13-Sep	Fri	HIV: Yangon	UNICEF, WHO(HIV), UNAIDS				
14-Sep	Sat						
15-Sep	Sun						
16-Sep	Mon	NPT	**meet to DG, DOH**				
17-Sep	Tue	NPT	**meeting & interview to CPs in NPT**				
18-Sep	Wed	Yangon	17:00 Report to JICA office with main team	NRT to Yangon 17:00 Report to JICA office		NRT to Yangon 17:00 Report to JICA office	

19-Sep	Thu	HIV: YGN - MDLY TB: YGN MLR: Bago	**[MLR]** Yangon→Kyauktagar T/S hospita→Nyatay Villege→Yangon	**[MLR]** Yangon→Kyauktagar T/S hospita→Nyatay Villege→Yangon	**[HIV]** AM : Yangon PM: To Mandalay	**[MLR]** Site visit for Malaria control Yangon→Kyauktagar T/S hospita→Nyatay Villege →Yangon	**[HIV]** AM : Yangon PM: To Mandalay
20-Sep	Fri	HIV: YGN - MDLY TB: Yangon MLR: Yangon	**[HIV]** Yangon → Mandalay site visit	**[HIV]** Yangon → Mandalay site visit	**[HIV]** Site visit in Mandalay & aroun areas: hospitals &STD team actitvities	**[MLR]** WHO, UNICEF, UNOPS	**[HIV]** Site visit in Mandalay & aroun areas: hospitals &STD team actitvities
21-Sep	Sat	All: YGN	to YGN	to YGN	to YGN	MLR Interview to Expert	to YGN
22-Sep	Sun	HIV, TB : YGN MLR: YGN-TNG	YGN	YGN	YGN	YGN	YGN
23-Sep	Mon	NPT	[TB] Yangon: Pharmacy acttivities (Hlaing township) + EQA activities (Latha TB centre) Hearing from Partners (WHO, Myanmar Medical Association)	[TB] Yangon: Pharmacy acttivities (Hlaing township) + EQA activities (Latha TB centre) Hearing from Partners (WHO, Myanmar Medical Association)	[HIV] AM : Yangon → Bago, site visit at Bago hospital & STD clinic PM: Bago → Nay Pyi Taw	[MLR] AM : YGN →Kyauk Kyi PM : Kyauk Kyi→ Toungoo (stay at Toungoo)	[HIV] AM : Yangon → Bago, site visit at Bago hospital & STD clinic PM: Bago → Nay Pyi Taw
24-Sep	Tue	NPT	Site visit to Pyinmana with TB	Site visit to Pyinmana with TB	Site visit to Pyinmana with TB	AM : Toungoo Dist. Office/ Health centers PM : TGN →NPT	Site visit to Pyinmana with TB
				17:00 Internal meeting			
25-Sep	Wed	NPT	MM conference(DOH)/ repot editting	MM conference(DOH)- each individual team			
26-Sep	Thu	NPT	MM conference(DOH)/ repot finalising	MM conference(DOH)- each individual team PM intarnal meeting with MTR mission team , & Project (for JCC)			
27-Sep	Fri	NPT to Yangon	**AM :JCC, MM signing** **PM: NPT to Yangon** **Report to JICA & EOJ**	**AM :JCC, MM signing** **PM: NPT to Yangon** **[Report to JICA & EOJ: right after the JCC meeting in NPT]**			
28-Sep	Sat	YGN to NRT		NH914(21:30 dep)			
29-Sep	Sun	Arrive at NRT					

Annex 3 List of Japanese Experts

No.	Name	Comp.	Field	Period
Long	Dr. Yoichi YAMAGATA	DOH	Chief Advisor	Apr 4, 2012 - Aug 31, 2013
Long	Mr. Masaharu MAEKAWA	DOH	Coordinator	Apr 22,, 2012 - May 20, 2013
Short	Ms Yuko HARUI	DOH	Coordinator	Jun 16 - Oct 20, 2013
Long	Dr. Toshiki AWAZAWA	HIV	HIV/ AIDS Control	May 1, 2012 - May 1, 2013
Long	Dr. Ikuma NOZAKI	HIV	HIV/ AIDS Control	Jul 22- Aug 31, 2013
Short	Dr. Hideki MIYAMOTO	HIV	Data Management	Jun 17 - Jul7,2012
Short	Dr. Namiko YOSHIHARA	HIV	Quality Assurance Management	Jun 21 - Jul 18, 2012
Short	Dr. Namiko YOSHIHARA	HIV	Quality Assurance Management	Nov 4 - Dec 1, 2012
Short	Dr. Hideki MIYAMOTO	HIV	Data Management	Nov 21 - Dec 14, 2012
Short	Dr. Namiko YOSHIHARA	HIV	Quality Assurance Management	Feb 6 - Mar 5, 2013
Short	Dr. Hideki MIYAMOTO	HIV	Data Management	Feb 12 - Mar 2, 2013
Short	Dr. Namiko YOSHIHARA	HIV	Quality Assurance Management	Jun 17 - Jul 13, 2013
Short	Dr. Hideki MIYAMOTO	HIV	Data/ STIs Syndromic Management	Jul 6 - 26, 2013
Long	Dr. Hiroyuki NISHIYAMA	TB	TB Control	Mar 22 - Jul 19,2012
		TB		Sep 1 - Dec 9, 2012
		TB		Jan 29 -Mar 9, 2013
		TB		Jan 29 - Jul 27, 2013
		TB		Aug20 -31, 2013
Short	Dr. Akira SHIMOUCHI	TB	TB Control	May 14- Jun 2, 2012
Short	Dr. Yutaka HOSHINO	TB	Radiophotography	Sep 30 - Oct 6, 2012
Short	Dr. Nobukatsu ISHIKAWA	TB	Community DOTS	Oct 14 - 22, 2012
Short	Dr. Norio YAMADA	TB	Emidemiological Statistics	Oct 22 - Nov 4, 2012
Short	Dr. Akira SHIMOUCHI	TB	TB Control	Nov 20 - Dec 9, 2012
Short	Dr. Nobukatsu ISHIKAWA	TB	Community DOTS	Feb 16 - 24, 2013
Short	Dr. Akira SHIMOUCHI	TB	TB Control	Feb 17 - Mar 2, 2013
Short	Dr. Akiko FUJIKI	TB	Quality Assurance Management	Mar 18 Apr 9, 2013
Short	Dr. Nobukatsu ISHIKAWA	TB	Community DOTS	Jun 10 - 18, 2012
Short	Dr. Akiko FUJIKI	TB	Quality Assurance Management	Jun 24 - Jul 7, 2012
Short	Dr. Akiko FUJIKI	TB	Quality Assurance Management	Jun 3 - Jul 10, 2013
Short	Dr. Koske OKADA	TB	TB Control/ Component Leader	Jul 7 - Jul 27, 2013
Short	Dr. Akira SHIMOUCHI	TB	TB Control	Sep 10 - 25, 2012
Short	Dr. Nobukatsu ISHIKAWA	TB	Community DOTS	Jul 13 - 21, 2013
Short	Dr. Norio YAMADA	TB	TB Control	Aug 5 - 18, 2013
Long	Dr. MasatoshiNAKAMURA	MLR	Malaria Control	Mar 11, 2012 - Aug 31, 2013
Short	Mr. Shinsuke MURAI	MLR	Program Quality Improvement	Nov 25 - Dec 16, 2012
Short	Dr. Chihiro SHIRAKAWA	MLR	Medical Anthropology	Nov 29 - Dec 9, 2012
Short	Ms Tomoko ONDA	MLR	Quality Assurance Management	Feb 2- Apr 12, 2013

Annex 4 List of Equipment Provided by the Project

Name of Equipment	Quantity	Unit Price in US$	Amount in US$
HIV/AIDS			
Pipette aid with battery charger	3	215	645
Digital Balance	1	820	820
Hot Air Oven	1	815	815
Copy Machine	1	1,050	1,050
Calcium Chloride 1M	3 bot (500 g)		210
Kaolin	3 bot (500 g)	30	90
Sterile Microvial with O'ring 2 ml	20 pkt (500 pcs/pkt)	225	4,500
Thrombin 10 KU	5 bot	500	2,500
Carbon Antigen 5 ml	50 bot	12	600
Serodia TPPA Test	10 box (100 test/box)	170	1,700
Disposible Pipette 5 ml	4	50	200
Disposible Pipette 10 ml	4	52	208
Disposible Pipette 25 ml	4	110	440
STI Drugs			9,414
TUBERCULOSIS			
Computed Radiography	2	40,000	80,000
		FY2012 Total	80,000
MALARIA			
Malaria Antibody Detection Kit (Bioline, Pacific Biotech)	500 Box (40 tests/box)	77	38,500
Tip for Micropipette	20 pack (1000 pcs/pack)		140
Micropipette	5	70	350
Rapid Diagnostic Test	82500 test (25 test/box)	1	75,900
Paracetamol			75,000
Artemether Injection	1000 box (6 amp/box)	5	4,500
Chloroquine	380 bot (1000 tab/bot)	13	4,940
Primaquine	380 bot (15 tab/bot)	15	180
Primaquine (additional)	748 bot		
GIS Software	7	2,500	17,500
Long Lasting Lnsecticidal Net	7.4	5,000	37,000
Spray Machine	10	432	4,320
Computer	7	772	5,404
Binocular Microscope	5	1,565	7,825
Giemsa Stain	6	185	1,110
		FY2012 Total	272,669
Temephos	15000	3.5	52,500
Swing type fogging machine	10	490	4,900
Test kit for detection of dengue	5000	8	40,000
		FY2013 Total	97,400
		Total	370,069
		FY2012 Total	23,192
		GRAND TOTAL	473,261

Annex 5 List of counterparts

Name	Position
Dr. Soe Lwin Nyein	Deputy Director General, DOH
Dr. Thar Tun Kyaw	Director, Disease Control, DOH
Dr. Thandar Lwin	Deputy Director, National TB Control, DOH
Dr, Saw Thein	Regional TB Officer, Upper Burma, National TB Control Program
Dr. Yin Thandar Lwin	Director, Public Health, DOH
Dr. Hla Mya Thway Einda	Deputy Director, Public Health, DOH
Dr. Htay Htay Tin	Director, National Health Laboratory
Dr. Win Thein	Deputy Director, National Health Laboratory
Dr. Khin Yi Oo	Deputy Director, National Health Laboratory
Dr. Nwe Nwe Oo	Medical Officer, National Blood Center
Dr. Han Nyunt	Township Medical Officer, Paukkhaung Township, Bago region
Dr. Yan Naing Mong	District Health Officer, Pyay District, Bago Region, DOH
Dr. Khin Htar Hnit	Township Health officer, OIC VBED team leader of Bago region
Dr. Phyu Phyu Htut	Assistant Pathologist, Mandalay General Hospital Blood Bank
Dr. Myat Ei Ei Aung	Medical Officer, Mandalay General Hospital Blood Bank
Dr. Htain Lin Aung	Station Medical Officer, Taung Le Station Hospital
Dr. Pyi Thar Soe	Medical Officer, Pyin Oo Lwin STD Team
Dr. Thin Thin New	Assistant Director, National TB Contrl, DOH
Dr. Su Su Htwe	Medical Superitendent, Pyin Oo Lwin District Hospital
Dr. Than Htay Aung	Medical Superintendent, Bago General Hospital
Dr. Ni Ni Aye	Deputy Medical Superitendentt, Bago General Hospital
Dr. Kyaw Naing Win	Team Leader, Bago STD Team Leader
Dr. Tun Kyaw Soe	TB Team Leader, Pyinmana General Hospital
Dr. Phyu New	Pathologist, Pyinmana General Hospital
Dr. Aung Naing	Team Leader, Pyinmana STD Team
Dr. Myo Thant	Regional Officer, Lower Burma, National AIDS Program
Dr Tin Mi Mi Khaing	Regional TB Officer, Lower Burma, National TB Programme
Dr Tin Tin Mar	Consultant Microbiologist, National EQA Centre, National TB Reference Laboratory
Dr Kyaw Naing	District TB Team Leader, National TB Programme
Dr Mya Mya Win	Township Medical Officer
Dr Kyaw Naing	District TB Team Leader, National TB Programme
Ms. Daw Ni Ni Win	Township Health Nurse/ TB Coordinator
Ms. Daw Aye Aye Thwe	PHS II (Public Health Supervisor Grade 2)
Dr. Aye Aye Moe	Township Medical Officer, South Okalapa, Yangon Region
Ms. Daw Tin Mar Win	TB Coordinator
Mr. Tin Maung Win	HA (Health Assistant)

Project Design Matrix (PDM), JICA Major Infectious Disease Control Project Phase 2, Myanmar (Version 3)

Date: 27 Sep., 2012

HIV/AIDS
Duration: 19 March 2012 – 18 March2015

Target Group: BTS staff and AIDS/STD officer
Target Area: Nationwide

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Super Goal - Health burden of HIV and syphilis infection is mitigated.			
Overall Goal - Transmission of HIV and syphilis due to blood transfusion is prevented at low level.	- National prevalence shows a downward trend.	- NAP Report - NBC data	
Project Purpose 1. National AIDS Program is strengthened for preventing HIV transmission through blood transfusion in collaboration with NHL and NBC, and for managing data.	1. Prevalence of HIV and Syphilis of the donated blood show a downward trend in project areas. 1.1. from 0.6% in 2010 to 0.4% in 2015 on HIV; 1.2. from 0.8% to 0.6% on syphilis.	- BTS unit data	- HIV/AIDS control by Myanmar side and other development partners progress. - HIV and syphilis infection except infection caused by blood transfusion does not increase very much. - Clinical use of blood is appropriate.
Outputs 1. Safe blood donation is enhanced. 2. Quality of screening of HIV and syphilis is ensured. 3. Capacity of data management and analysis on HIV/AIDS control activities is improved.	1.1 Number of BTS unit adopting SOP on blood safety guideline will increase from 160 in 2011 to 280 in 2015. 2.1 Number of laboratories under NEQAS 2.2 Rates of laboratories reporting aberrant test results (false positive or negative rates) of NEQAS on HIV and syphilis will be maintained at low level 3.1 Annual reports on blood safety for HIV control are published. 3.2 Annual reports which compile data of testing quality assurance on HIV and syphilis are published.	- Reports from NAP, NBC, NHL - Project reports	

Activities 1.1 Train TMO, BTS (Blood Transfusion Service) staff and AIDS/STD officer for blood safety in focused States/Regions. 1.2 Monitor BTS by reporting system, review meetings and field visits. 1.3 Advocacy meeting for raising awareness of the importance of blood safety for HIV prevention among stakeholders. 1.4 Propose sustainable HIV test kit procurement measures 2.1 Train laboratory staff for NEQAS HIV testing. 2.2 Develop EQAS for syphilis testing. 2.2.1 Train laboratory staff for syphilis testing. 2.2.2 Develop guideline on syphilis testing and dissemination of the guideline. 2.3 Monitor the performance of laboratory staff and provide guidance to them by NHL and NAP. 2.4 Upgrade testing in NBC. 3.1 Conduct pre-service training for new AIDS/STD officials. 3.2 Train NAP officials including States/Regions AIDS/STD officers and team leaders for data management and analysis. 3.3 TOT for syndromic management of STI in the focused States/Regions. 3.4 Third country training	Inputs: <Japanese> - Experts 1. Chief Advisor 2. Project Coordinator 3. HIV/AIDS Control/Blood Safety 4. Quality Assurance for Laboratory Testing 5. Data Management - Supply and equipment HIV test kits, STI drugs, equipment for laboratory test or blood screening etc. - Training - Operational cost - Other necessary support <Myanmar> - National AIDS Program Office - Running costs - Necessary supply	- Change of personnel of the counterparts does not affect implementation of the Project. - Supply and distribution of reagents are sustained in all testing sites. Pre-conditions: - National HIV/AIDS control strategy is not changed. - International environment for supporting HIV control is not changed. - Allocation of necessary human resources by Counterpart institution for the Project is secured.

- abbreviations
  - HIV: Human Immunodeficiency Virus
  - AIDS: Acquired Immuno Deficiency Syndrome
  - NAP: National AIDS Program
  - NHL: National Health Laboratory
  - NBC: National Blood Center
  - BTS: Blood Transfusion Service
  - SOP: Standard Operational Procedure
  - EQAS: External Quality Assurance Scheme
  - NEQAS: National EQAS
  - TMO: Township Medical Offer
  - STD: Sexually Transmitted Disease
  - STI: Sexually Transmitted Infection
  - TOT: Training of Trainer

Major Infectious Diseases Control Project Phase 2 【HIV/AIDS】
Plan of Operation (Oct. 2013 - Mar 2015)

As of Sep 2013

No.	Activity	Plan of Action		2013			2014											2015			Remark
				10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
1-1	Train TMO, BTS staff and AIDS/STD officer for blood safety in focused States/Divisions	3 State/Region/ yr, 50 participants/time for 2 days	Plan			○	○				○					○			○			HIV test kit
			Actual																			
1-2	Monitor BTS by reporting system, annual review meetings and field visits	Annual review meeting with pathologist from nation wide	Plan				○												○			Regular report from hospitals
			Actual																			
		Field visit(combined with activity 2-3)	Plan	○				○				○					○			○		
			Actual																			
		Improvement of computerised Registration System	Plan	○																		
			Actual																			
1-3	Advocacy meeting for raising awareness of the importance of blood safety for HIV prevention among stakeholders	Organize advocacy meeting	Plan					○														
			Actual																			
		Publish newsletter of National Blood Center 3 monthly	Plan		○			○			○			○			○			○		
			Actual																			

No.	Activity	Plan of Action		2013			2014											2015			Remark
				10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
2-1	Train laboratory staff for NEQAS HIV testing	One time/year, 30 participants/time for 3 days	Plan									○										Microvials, Reagent
			Actual																			
2-2	Develop EQAS for syphilis testing		Plan																			
			Actual																			
2.2.1	Train laboratory staff for syphilis testing	There times/year, 20 participants for 3 days	Plan	○○								○				○				○		Microvials, Reagent
			Actual																			
2.2.2	Develop guideline on syphilis testing and it is disseminated.	Meeting to develop Guideline on Syphilis Testing	Plan				○	○														
			Actual																			
		Printing and disseminating	Plan					○	○													
			Actual																			
2-3	Monitor the performance of laboratory staff and provide guidance to them by NHL and NAP	Supervisory visit to local laboratory	Plan	○				○				○				○				○		
			Actual																			
2-4	Upgrade Testing of Regional Blood Bank	one regional blood bank per year	Plan			○												○				
			Actual																			
A	Renovation of Practical Room for HIV and Syphilis NEQAS Training		Plan	○																		
			Actual																			

No.	Activity	Plan of Action		2013			2014											2015			Remark
				10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
3-1	Conduct pre-service training for new officers of AIDS/STD Team	One time/year, 15 participants/time, 3 days/time	Plan	○												○						
			Actual																			
3-2	Train NAP staff and regional AIDS officer for data management and analysis	Train NAP staff and regional AIDS officer for GIS software, One times/year, 15 participants/time, 5	Plan					○												○		
			Actual																			
3-3	TOT for STI syndromic management in the focused States/Divisions	Four State/Region/year, 2 participants per township, 2 days per time	Plan			○	○				○		○	○				○				BHS manual, Poster
			Actual																			
3-4	Third country training	5 NAP officers for 2 weeks	Plan				○						○									
			Actual																			
3-5	Conducting Operationla Research		Plan																			
			Actual																			

Project Design Matrix (PDM), JICA Major Infectious Diseases Control Project Phase 2, Myanmar (Version 3)

Date: 27September 2013

TB
Duration: 19 January 2012 – 18 January 2015

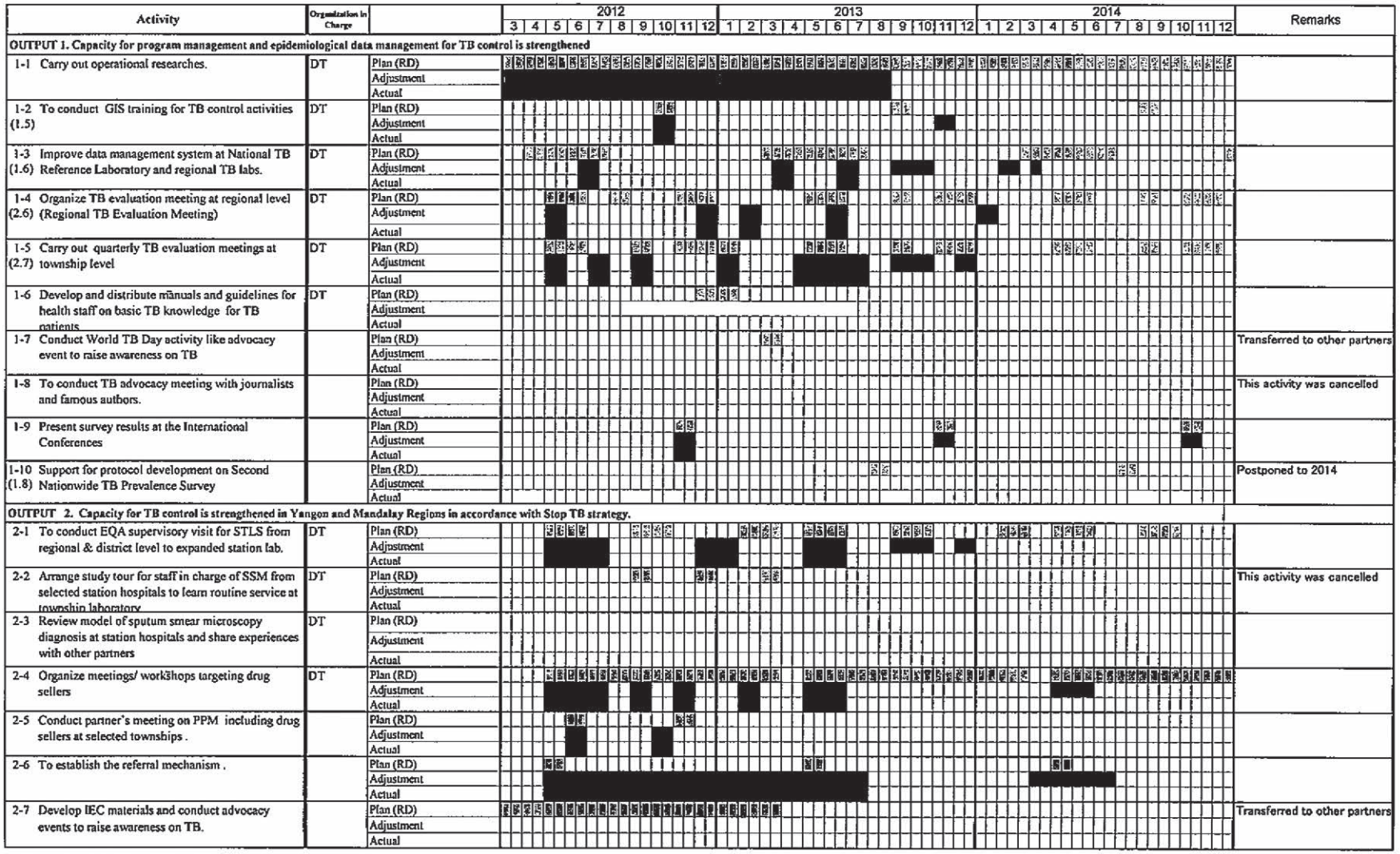
Target Group: Residents in Yangon & Mandalay Regions
Target Area: Yangon and Mandalay Regions

NARATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Overall GOAL 1. To halt and reverse Tuberculosis (TB) incidence	1.1 New smear positive TB detected is maintained 1.2 Case notification rate (all forms of TB) is increased up to 2015 and shows a downward trend	1.1 National TB Program (NTP) annual report 1.2 - ditto -	
PROJECT PURPOSE TB Control in Yangon and Mandalay Regions improved	1. More than 70% in Case Detection Rate (CDR) and more than 85% in Treatment Success Rate (TSR)are achieved or sustainedin implementing Townships by year 2015 2. Case detection in implementing Townships by Drug Seller Referral is increased by 3.2% 3. Case detection in implementingTownships byCBTBC is increased by 3.2% 4. TB suspect examination in implementingTownships in Yangon and Mandalay Regions is increased by 10%	1. NTP annual report 2. Township data	
OUTPUTS 1. Capacity for program management and data management for TB controls is strengthened	1.1 10townships utilizing developed guidelines of eitherCBTBC or drug sellers' referral to expand the related activities 1.2 90% of the laboratories with no major error on quarterly basisthrough utilizing EQA annual report in Yangon and Mandalay Regions	1.1 NTP Report 1.2 NTP Report	Drug supply maintained Vacant laboratory technicians' posts do not increase
2. Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with Stop TB Strategy	2.1 90% of the laboratories with no major erroron quarterly basisthrough utilizing EQA annual report in StationHospitals. 2.2 TB suspect examinationby drug sellers in project areasis increased by 10% 2.3 TB suspect examinationby community volunteers in project areasis increased by 5% 2.4Case detection by drug sellers in the project areas is increased by 5% 2.5 Case detection by community volunteers in the project areas is increased by 5%	2.1 NTP Report 2.2 Project record 2.3 Project record 2.4 Project record 2.5 Project record	HIV prevalence remains stable

Activities	Inputs	
To Improve the Program Management <Guideline Development and Utilization> 1.1 Carry out operational researches on CBTBC and Drug Seller referral based on piloting activities including social mobilization and training 1.2 Develop CBTBC and Drug Seller referral guidelines and share guidelines, experiences and results with other development partners 1.3 Utilize guidelines for expansion of standardized activities by other fund 1.4 Monitor and evaluate the standardized activities <Data Management and Utilization> 1.5 Train on data and information management such as GIS Training 1.6 Improve EQA data management at National TB Reference Laboratory 1.7 Present OR results at the international conferences 1.8 Develop draft protocol on Second Nationwide TB Prevalence Survey scheduled in 2017 <Training> 1.9 Conduct training related to the activities in line with Stop TB Strategy eg. TB/HIV, chest X-ray, counselling etc. <Model of Improvement inSputum Smear Microscopy Performance at Station Hospitals> 2.1 Conduct supervision to station hospitals' sputum smear microscopy 2.2 Review model of sputum smear microscopy diagnosis at station hospitals and share experiences with other partners 2.3 Organize mobile team activities in high risk group, hard-to-reach areas, urban and peri-urban areas <Expansion ofModel Activitiesof CBTBC and Drug Seller referral> 2.4 Introduction and expansion of the activity of CBTBC	(By Japan) 1. Experts: 1) Chief Advisor 2) Project Coordinator 3) TB control and prevention 4) Quality Assurance for smear sputum microscopy 5) Community Based TB Care 6) Epidemiology 2. Supply and equipment: 3. Training/ Conference 4. Operational cost 5. Other necessary cost (By Myanmar) 1. Project office facilities 2. NTP officers 3. Necessary supply	A lot of counter parts do not resign

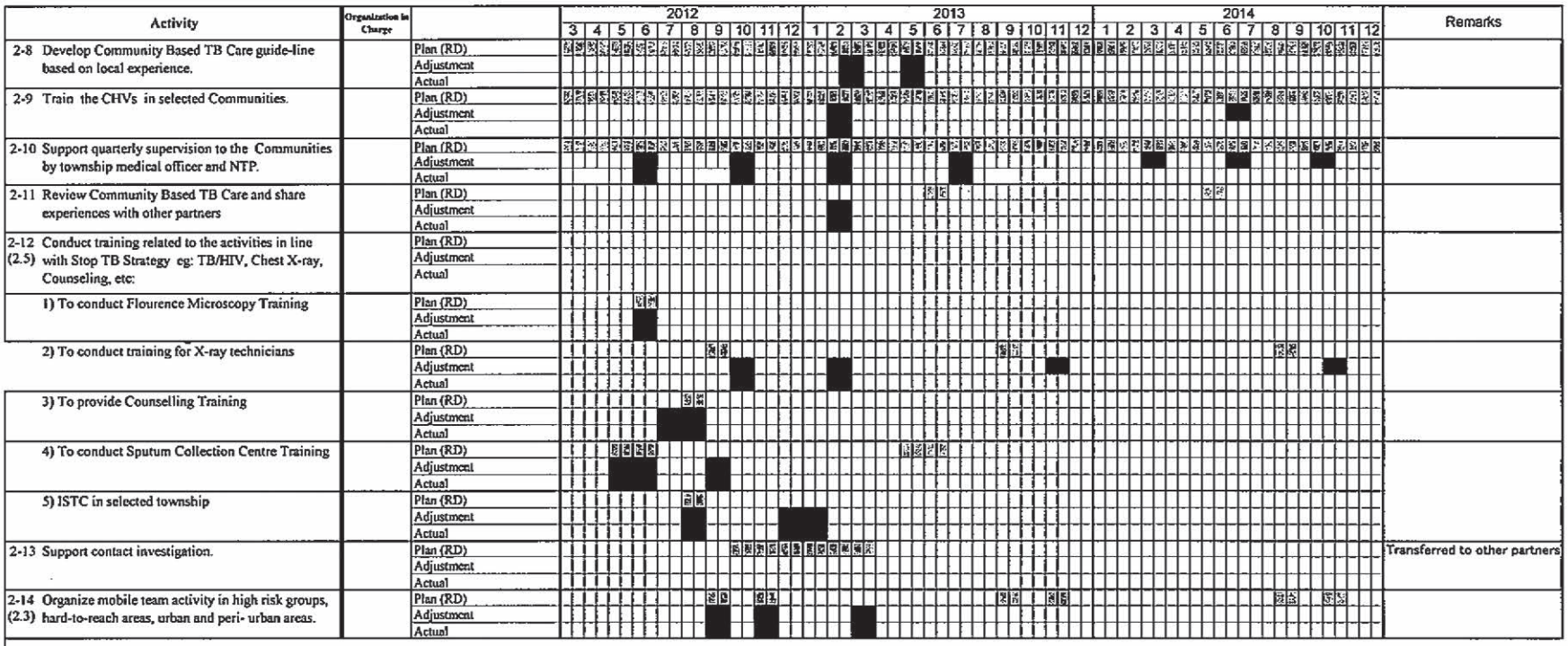
and Drug Seller referral **To Improve the Program Management in Yangon and Mandalay Region** <Coordination/ Collaboration with Entities Conducting TB Control Activities> 2.5 Organize TB meetings for Monitoring & Evaluation of township (Regional TB Evaluation Meeting)and for coordination/ collaboration with partners 2.6 Carry out quarterly TB meetings at township level for further improvement of case finding and case holding		*Pre-Conditions* Allocation of necessary human resources by Counterpart institution for the Project is secured National Tuberculosis control strategy is not changed International environment for supporting TB control is not changed

Plan of Operations (P/O) Ver. 3 (include Achievements and adjustment as of 26 July 2013)



Activity	Organization in Charge		2012 3 4 5 6 7 8 9 10 11 12	2013 1 2 3 4 5 6 7 8 9 10 11 12	2014 1 2 3 4 5 6 7 8 9 10 11 12	Remarks
OUTPUT 1. Capacity for program management and epidemiological data management for TB control is strengthened						
1-1 Carry out operational researches.	DT	Plan (RD)				
		Adjustment				
		Actual				
1-2 To conduct GIS training for TB control activities (1.5)	DT	Plan (RD)				
		Adjustment				
		Actual				
1-3 Improve data management system at National TB (1.6) Reference Laboratory and regional TB labs.	DT	Plan (RD)				
		Adjustment				
		Actual				
1-4 Organize TB evaluation meeting at regional level (2.6) (Regional TB Evaluation Meeting)	DT	Plan (RD)				
		Adjustment				
		Actual				
1-5 Carry out quarterly TB evaluation meetings at (2.7) township level	DT	Plan (RD)				
		Adjustment				
		Actual				
1-6 Develop and distribute manuals and guidelines for health staff on basic TB knowledge for TB patients	DT	Plan (RD)				
		Adjustment				
		Actual				
1-7 Conduct World TB Day activity like advocacy event to raise awareness on TB		Plan (RD)				Transferred to other partners
		Adjustment				
		Actual				
1-8 To conduct TB advocacy meeting with journalists and famous authors.		Plan (RD)				This activity was cancelled
		Adjustment				
		Actual				
1-9 Present survey results at the International Conferences		Plan (RD)				
		Adjustment				
		Actual				
1-10 Support for protocol development on Second (1.8) Nationwide TB Prevalence Survey		Plan (RD)				Postponed to 2014
		Adjustment				
		Actual				
OUTPUT 2. Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with Stop TB strategy.						
2-1 To conduct EQA supervisory visit for STLS from regional & district level to expanded station lab.	DT	Plan (RD)				
		Adjustment				
		Actual				
2-2 Arrange study tour for staff in charge of SSM from selected station hospitals to learn routine service at township laboratory	DT	Plan (RD)				This activity was cancelled
		Adjustment				
		Actual				
2-3 Review model of sputum smear microscopy diagnosis at station hospitals and share experiences with other partners	DT	Plan (RD)				
		Adjustment				
		Actual				
2-4 Organize meetings/ workshops targeting drug sellers	DT	Plan (RD)				
		Adjustment				
		Actual				
2-5 Conduct partner's meeting on PPM including drug sellers at selected townships .		Plan (RD)				
		Adjustment				
		Actual				
2-6 To establish the referral mechanism .		Plan (RD)				
		Adjustment				
		Actual				
2-7 Develop IEC materials and conduct advocacy events to raise awareness on TB.		Plan (RD)				Transferred to other partners
		Adjustment				
		Actual				

Plan of Operations (P/O) Ver. 3 (include Achievements and adjustment as of 26 July 2013)



Activity	Organization in Charge		Remarks
2-8 Develop Community Based TB Care guide-line based on local experience.		Plan (RD) Adjustment Actual	
2-9 Train the CHVs in selected Communities.		Plan (RD) Adjustment Actual	
2-10 Support quarterly supervision to the Communities by township medical officer and NTP.		Plan (RD) Adjustment Actual	
2-11 Review Community Based TB Care and share experiences with other partners		Plan (RD) Adjustment Actual	
2-12 (2.5) Conduct training related to the activities in line with Stop TB Strategy eg: TB/HIV, Chest X-ray, Counseling, etc:		Plan (RD) Adjustment Actual	
1) To conduct Flourence Microscopy Training		Plan (RD) Adjustment Actual	
2) To conduct training for X-ray technicians		Plan (RD) Adjustment Actual	
3) To provide Counselling Training		Plan (RD) Adjustment Actual	
4) To conduct Sputum Collection Centre Training		Plan (RD) Adjustment Actual	
5) ISTC in selected township		Plan (RD) Adjustment Actual	
2-13 Support contact investigation.		Plan (RD) Adjustment Actual	Transferred to other partners
2-14 (2.3) Organize mobile team activity in high risk groups, hard-to-reach areas, urban and peri- urban areas.		Plan (RD) Adjustment Actual	

Project Design Matrix (PDM), JICA Major Infectious Diseases Control Project Phase 2, Myanmar (Version 3)

Date: 27September 2013

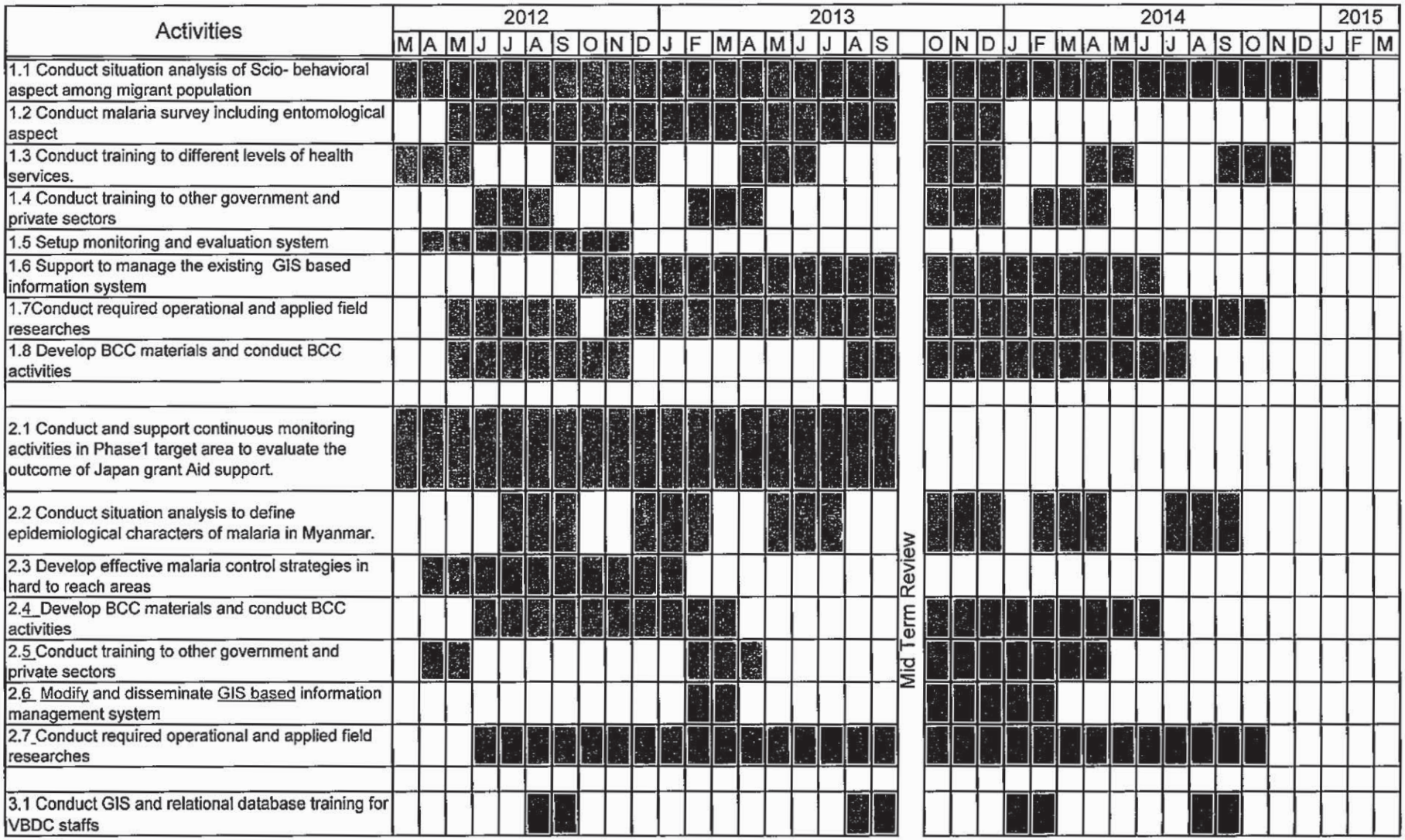
Malaria
Duration: 19 January 2012 – 18 January 2015

Target Group:People and communities affected by malaria
Target Area: Entire Myanmar (Depends on the activities)

NARATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Overall GOAL 1. National Malaria Control Program is strengthened nationwide	1.1 No. of malaria patients examined and treated shows downward trend 1.2 Declining trend of malaria deaths No.continues	1.1 National Malaria Control Program (NMCP) Report 1.2 – Ditto –	
PROJECT PURPOSE Implementation/ monitoring capability of National Malaria Control Program isimproved in the Target area	1. Full scale implementation of community based Malaria control activities in hard to reach areas developed by the Project has commenced	1. NMCP Report	
OUTPUTS 1. Myanmar Artemisinin Resistance Containment (MARC) Project is strengthened in the MARC area	1.1 11 Townships among 51 Townships embracing MARC Tier 1 and 2 implement Malaria Control Program withCHW System in hard to reach areas in Bago Region and Kayin State	1.1 Project record	Large scale epidemics not occur in the project area
2. Community based malaria control is effectively conducted in Bago Region	2.1 All 8 Townshipseligible for ordinary Malaria Control Programimplement Program with CHW System in west part of Bago Region	2.1 – Ditto –	
3. Capability of program management in different levels of malaria and other vector borne diseases are strengthened nationwide	3.1 All Regions/ States utilize GIS for documentation and data analysis 3.2 4 newly developed databases are utilized for program improvement	3 – Ditto –	
4. Outcomes from the Project are utilized among the partner for further strengthening of National Malaria Control Program	4.1 Quantity of theproject outcomes shared, published and utilized among the partners	4 – Ditto –	

Activities	Inputs	
1.1 Conduct Situation analysis of socio- behavioural aspect among migrant population 1.2 Conduct malaria survey including entomological aspect 1.3 Conduct training to different levels of health services 1.4 Conduct training to other government and private sectors 1.5 Setup monitoring and evaluation system 1.6 Support to manage existing GIS based information system 1.7 Conduct required operational and applied field researches 1.8 Develop BCC (Behaviour Change Communication) materials and conduct BCC activities 2.1 Conduct and support continuous monitoring activities in Phase 1 target area to evaluate the outcome of Japan Grant Aid support 2.2 Conduct situation analysis to define epidemiological characters of malaria in Myanmar 2.3 Develop effective malaria control strategies in hard-to-reach areas 2.4 Develop BCCmaterial and conduct BCC 2.5 Conduct training to other government and private sectors 2.6 Modify and disseminate GIS based information management system 3.1 Conduct GIS and Relational database training for VBDC staffs 3.2 Develop relational database for malaria and other vector borne disease control programs 3.3 Develop relational database for analysing malaria survey 3.4 Conduct required operational and applied field researches 3.5 Conduct workshop and seminar 4.1 Demonstrate and disseminate the outcome of the project through partnership in TSG (Technical Strategy Group) and other meeting 4.2 Hold seminar and workshop for demonstrating the outcome of the Project 4.3 Conduct Collaborative activities with partners	(By Japan) 1. Experts: 1) Chief Advisor 2) Project Coordinator 3) Malaria Control 4) Medical Anthropology 5) Information Management 6) GIS 2. Supply and equipment:Malaria medicine, RDT, Antibody detection test kits, microscope, insecticide spray, LLIN (Long-Lasting Insecticide Net), equipment for entomological activities etc. 3. Training 4. Operational cost (By Myanmar) 1. Project office facilities 2. VBDC staffs under NMCP 3. Available training facilities at different levels 4. Running cost (Water, Electricity etc.) 5. Necessary supply	Cooperation and collaboration with other sectors and partners related to malaria control suchas forestry department, etc. maintain *Pre-Conditions* Assignment of necessary human resources by counterpart institution for technical cooperation is secured National Malaria Control Strategy is not changes

Plan of Operation (Malaria Component)



Activities	2012										2013												2014												2015		
	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
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