I Outline	of the Project				
<b>Country</b> : Republic of the Union of Myanmar		Project title : The Major Infectious Diseases Control Project (Extension Period of Phase I)			
Issue/Sector : Health Sector		<b>Cooperation scheme :</b> Technical Cooperation Project			
Division in charge : Human Development		Total cost (estimated at completion of the Project) :			
Department, JICA		291 million yen			
		Partner Country's Implementing Organization :			
		Department of Health (DOH), Ministry of Health (MOH)			
	June 19, 2010 to July 18, 2012	HIV: National AIDS Program (NAP)			
		National Health Laboratory (NHL)			
		National Blood Center (NBC)			
		<b>TB:</b> National Tuberculosis Control Program (NTP)			
		Malaria: National Malaria Control Program (NMCP)			
Period of Cooperation		Supporting Organization in Japan :			
		HIV: National Center for Global Health and Medicine			
		(NCGM)			
		<b>TB:</b> Japan Anti – Tuberculosis Association (JATA)			
		Other relevant Japanese assistance:			
		- Provision of equipment for safety blood by Grassroots			
		Human Security Grant Aid			
		- Provision of equipment for malaria control and			
		anti-TB drugs by Grant Aid			

# **Summary of Terminal Evaluation**

#### 1 Background of the Project

In Myanmar, infectious diseases have been posing a serious threat to the population, among which HIV/AIDS, tuberculosis, and malaria are recognized as most significant to be tackled.

Having faced with the great socio-economic burden of three major infectious diseases, technical assistance was requested, and implemented the Major Infectious Diseases Control Project (Phase I) to control HIV/AIDS, tuberculosis, and malaria from 19 January, 2005 to 18 January, 2010. As a result of the terminal evaluation of the Project in July 2009, the Project has been extended for more two years to expand further activities of the Project to other areas and to improve quality of the Project activities.

#### (a) HIV/AIDS control

Enhancing National AIDS Program (NAP),

- Strengthen blood referral system in major health/medical facilities under National Blood center (NBC)
- Strengthen HIV test with National Health Laboratory (NHL)
- Strengthen capacity of NAP staff

(b) Tuberculosis (TB) control

Enhancing National Tuberculosis Program (NTP) in Yangon and Mandalay Regions,

- Improve capacity of program management for staff engaged TB control

- Improve TB test operation
- Implement and stimulate PPP (Public Private Partnership)
- stimulate IEC (Information, Education, communication) activities

(c) Malaria control

Introduce community based malaria control program in 16 townships of East/West Bago Region (added

Magway Region and Rakahine State in the extension period). Through developing Malaria Control packages such as community based malaria control program to be able to easily expand other areas and adopt large-scale program funded by GFATM etc., National Malaria Control Program is strengthened.

As the Project is scheduled to be terminated at January 2012, JICA dispatched the mission for Terminal Evaluation of the Extension Period of the Project (Phase I).

# 2 Project Overview

# 2-1 HIV/AIDS

Enhancing National AIDS Program (NAP),

- Strengthen blood referral system in major health/medical facilities under National Blood center (NBC)
- Strengthen HIV and syphilis test with National Health Laboratory (NHL)
- Strengthen capacity of NAP staff

# (1) Overall Goal

HIV transmission is reduced nationwide.

# (2) Project Purpose

National AIDS Program is strengthened.

# (3) Outputs

1) Blood safety for HIV and TTI is enhanced.

2) Quality Assurance of HIV test and other TTIs are improved.

3) Capacity of National AIDS Program is strengthened.

# (4) Inputs (as of the end of May, 2011)

# <u>Japanese side</u>

1) Dispatch of Experts: 3 short term experts (a total of 5 persons),

Note: Besides above short term experts, one long term expert as chief advisor and one expert as project coordinator (a total of 4 persons) have been engaged in three diseases.

2) Provision of Equipment: US\$ 114,000

3) Provision of facility: Office space as a HIV/AIDS component office and a project administration office are provided by Japanese side.

4) Local Cost Support: Total expense for HIV/AIDS activities US\$103,000

Total operation expenses as project managementUS\$149,000(Common expense in HIV/AIDS, tuberculosis and malaria)

5) Third Country Training in Thailand: 6 Counterparts (13, February to 26, February 2011)

# <u>Myanmar side</u>

1) Assignment of Counterpart personnel: A total of 8 key Counterparts including 3 high officials for overseeing three-diseases, one Program Manager and two Assistant Director from NAP, one Director from NHL and one officer in charge from NBC

2) Local cost support: Local operation expenses for transportation cost, etc.

# 2-2 Tuberculosis

Enhancing National Tuberculosis Program (NTP) in Yangon and Mandalay Regions,

- Improve capacity of program management for staff engaged TB control
- Improve TB test operation
- Implement and stimulate PPP (Public Private Partnership)
- stimulate IEC (Information, Education, communication) activities

#### (1) Overall Goal

New TB infection is controlled in Yangon and Mandalay Regions.

#### (2) Project Purpose

TB control in Yangon and Mandalay Regions is improved.

#### (3) Outputs

- 1) Capacity for program management and epidemiological data management for TB control is strengthened at central level.
- 2) TB laboratory services are improved.
- 3) Capacity for TB control is strengthened in Yangon and Mandalay Regions in accordance with stop TB strategy.
- 4) Public Private Partnership is enhanced
- 5) Communication and advocacy for TB control is promoted.

#### (4) Inputs

#### <u>Japanese side</u>

- 1) Dispatch of Experts: 3 Short term experts (a total of 6 persons)
- Note: Besides above short term experts, one long term expert as chief advisor and one expert as project coordinator (a total of 4 persons) have been engaged in three diseases.
- 2) Provision of Equipment: US\$ 34,000
- 3) Local Cost Support: Total expense for TB activities US\$ 139,000

#### <u>Myanmar side</u>

- 1) Assignment of Counterpart personnel: A total of 7 key Counterparts, including 3 high officials for overseeing three-diseases, one program manager, and three Assistant Managers from NTP
- 2) Provision of facilities: Office spaces
- 3) Local cost support: Local operation expenses for utilities in offices such as electricity, telephone and water, transportation cost, etc.

#### 2-3 Malaria

Introduce community based malaria control program in East/West Bago Region, Magway Region and Rakahine State. Through developing Malaria Control packages such as community based malaria control program to be able to easily expand other areas and adopt large-scale program funded by GFATM etc., National Malaria Control Program is strengthened.

#### (1) Overall Goal

Malaria control is strengthened beyond the project sites.

#### (2) Project Purpose

National malaria control is strengthened.

#### (3) Outputs

1) Capacity of health personnel on malaria control (reporting, supply, planning and epidemiological analysis) at Region/State, Township levels is strengthened.

2) The community based malaria control program package is effectively implemented in target area.

3) System for prediction and management of epidemics is utilized in target area.

4) Collaborative activities with other partners and sectors are strengthened.

# (4) Inputs

# <u>Japanese side</u>

1) Dispatch of Experts: 4 short term experts (a total of 11 persons)

Note: Besides above short term experts, one long term expert as chief advisor and one expert as project coordinator (a total of 4 persons) have been engaged in three diseases.

2) Provision of Equipment: US\$ 23,000

3) Local Cost Support: Total expensed for Malaria activities US\$ 142,000

# <u>Myanmar side</u>

1) Assignment of Counterpart personnel: A total of 7 key Counterparts including 3 high officials for

overseeing three-diseases, one Director/Program Manager,

one Deputy Director and two Assistant Director from VBDC

2) Provision of facilities: Office spaces

3) Local cost support: Local operation expenses for transportation and utilities in the office such as electricity, telephone and water

II Evaluation Team						
	Name	Assignment	Organization / Institution			
Members of Evaluation Team	Dr. Mitsuhiro USHIO	Team Leader	Executive Technical Advisor to the Director General, Human Development Department, JICA			
	Dr. Chiaki MIYOSHI	HIV/AIDS Control	Director, 2 <sup>nd</sup> Expert Service Division, Bureau of International Cooperation			
	Dr. Toru MORI	Tuberculosis Control	Director Emeritus, The Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosi Association (JATA)			
	Dr. Chihiro SHIRAKAWA	Malaria Control	Associate Professor, National Museum of Ethnology			
	Mr. Shinobu YOSHIZAWA	Planning Cooperation	Program Officer, Health Division III, Human Development Department, JICA			
	Mr. Kunio NISHIMURA	Evaluation & Analysis	Senior Consultant, ICONS, Inc			
Period of Evaluation	June 19, 2011 to July 14, 2011		Type of Evaluation : Terminal Evaluation on Extension period			

# III Results of Evaluation

# 1. Project Performance

# 3-1-1. HIV/AIDS

# (1) Project Purpose: National AIDS Program has been strengthened.

Though HIV Prevalence among blood donor of 7 Core Hospitals was less than 0.5% in 2010, Magway was slightly more than 0.5%. But Magway decreased to 0.4% in March 2011. Averages of ratio among 7

Core Hospitals were 0.43% in 2009 and 0.26% in 2010.

### (2) Outputs

# 1) Output 1: Blood safety for HIV and TTI has been enhanced.

-In 2010, total 127 hospitals adopted blood deferral such as 7 hospitals in Yangon, 5 hospitals in Kachin, 6 hospitals in Southern Shan, 4 hospitals in Northern Shan, 9 hospitals in Mandalay, 25 hospital in Magway, 14 hospitals in Bago (West), 14 hospitals in Bago (East), 4 hospitals in Kayin, 3 hospitals in Taninthayi, 18 hospitals in Sagaing, 6 hospitals in Rakhine, 5 hospitals in Ayeyarwaddy and 7 hospitals in Mon Region.

-After the consensus meeting for the development of Standard Operating Procedure (SOP) for blood safety in February 2010, the SOP (final manuscript) was completed in May 2010 and got official approval of MOH in March 2011. 1,000 copies of SOP for Blood safety are going to be distributed to hospitals all over the country. Based on SOP, TOT trainings were conducted to pathologists and doctors (58 in total) of 22 hospitals in 16 States and Regions at NBC in June, July and October 2010. And Multiplier Training courses were also conducted in 5 States and Regions in 2010 and 2011.

-Concerning reporting on transfusion services, out of 127 targeted transfusion services, only 62 services reported (21 services reported correctly and regularly, 8 services reported regularly with incorrect form, 33 services reported correctly and irregularly) in 2010. Out of 148 targeted transfusion services, 34 services reported regularly (in which 6 services were incorrect forms) and 71 services reported irregularly (in which 62 services were correct forms) up to March 2011.

-First Meeting was held at NBC with the participation of 28 pathologists and blood bank staff of 28 hospitals of 14 States and Regions in June, 2010. Second Meeting was held at NBC with the participation of 32 staff of 29 hospitals of 14 States and Regions in February 2011.

#### 2) Output 2: Quality Assurance of HIV test and other TTIs have been improved.

-302 laboratories (230 public hospital labs, 41 AIDS/STD team lab, 31 International NGO labs) covered External Quality Assurance (EQA) program in 2010. Out of 287 (15 lab not reported), 26 lab (9.1%) gave aberrant test result.

-Supervisory visits to AIDS/STD teams of 40 medical institutions in 5 States and Regions were carried out in collaboration with NHL, NBC, NAP and JICA experts as of March 2011.

-National External Quality Assessment Scheme (NEQAS) guideline which had been developing in collaboration with NAP and NHL was officially approved in May 2010. Based on the NEQAS, a refresher training course was conducted at NHL in September 2010 with 32 laboratories of 31 hospitals all over the country.

1,000 copies of the guideline were distributed to public hospitals, INGOs and United Nations agencies in September 2010.

3) Output 3: Capacity of National AIDS Program has been strengthened.

-The Project supported these activities as routine works of NAP: National Annual Review meeting on HIV/AIDS control (August 2010), Annual Review Meeting by the Project (February 2011), the test kit coordination meeting (June, September and December 2010, March 2011) and Technical Strategy Group (TSG) meeting (September 2010, March 2011), the exhibitions of the Project activities in World AIDS Day ceremony (December 2010).

-In September/October 2010, pre-service training for 15 new NAP staff was conducted and consisted of introduction of NAP activities, surveillance, STI syndromic management, Prevention of Mather to Child Transmission (PMCT), prevention against HIV infection, role of Sexually transmitted Disease (STD) staff, activities of Voluntary Confidential Consulting and Testing (VCCT), etc.

-Training on Data Management for 41 AIDS/STD team staff was conducted in September 2010(guidance on strengthening data management and reporting system for HIV/AIDS, STI cases).

-Training on STI syndromic management for 47 participants in Magway in January/February 2011 and 69 participants in Sagaing in February 2011 was conducted. Furthermore, multiplier training was conducted by the doctor who took part in the above training course to BHS staff in each township.

-4 AIDS/STD Team officers and 2 MOH staff participated in Third Country Training on strengthening of the management capacity at Mahidol University, Thailand in February 2011.

# 3-1-2. Tuberculosis (TB)

# (1) Project Purpose: TB control in Yangon and Mandalay Regions has been improved.

CDR and CR in 2010 in Yangon and Mandalay are as follows and Project purpose has been almost achieved.

	2010				
	Yangon	Mandalay			
CDR	82%	67%			
CR	86%	83%			

#### (2) Outputs

# 1) Output 1: Capacity for program management and epidemiological data management for TB control has been strengthened at central level.

-Results of National Prevalence Survey (2009-2010) were authorized by MOH and international organizations, and published such as Documentary National TB Prevalence Survey Video.

-Counterpart at Regional TB Office in Yangon presented at 41st Union World Conference on Lung Health at Berlin in November 2010 with Japanese expert.

#### 2) Output 2: TB laboratory services have been improved.

-The skilled laboratory technicians increased 184 in 2009, 237 in 2010 and 253 in 2011.

-No. of TB suspects (eligible for sputum examination) in selected areas increases compared with 2009 and 2010 as follows.

	2009	2010	2011(Q1)
Yangon Region	38,582	40,533	11,733
Mandalay Region	16,790	18,198	5,363

# 3) Output 3: Capacity for TB control has been strengthened in Yangon and Mandalay Regions in accordance with stop TB strategy.

-3,110 Chest X-Ray (CXR) films taken at Prevalence Survey were conducted for quality evaluation in July 2010. And CXR interpretation training was conducted with 33 participates in January 2011.

Yangon Region		N.Okkalapa	Kyimyindaing	Thanlyin
No. of TB patients	696	597	206	315
No. of registered TB patient >15 Years of age	567	498	160	285
No. of TB patients VCCT accepted and HIV tested	71	293	53	148

-The following activities were conducted as TB-HIV Prevention and Control Activities in 2010.

% of VCCT tested	13%	59%	33%	52%
No. of TB patients HIV sero positive in VCCT		16	6	9
HIV sero positivity rate	21%	5.5%	11%	6%

-Home visit and Sputum collection activities for family contacts screening and patients detecting were conducted as follows.

		No. of TB patients	No. of contacts	No. of smear examination	sm+	No. of CXR	CXR +
Yangon Region	Lanmadaw Sep 2010-Feb 2011	54	108	100	0	40	1
Mandalay Region	Meikhtila Nov2010-Apr 2011	282	1,183	12	1	-	-

#### 4) Output 4: Public Private Partnership has been enhanced.

Regional/District Partner's meetings as PPP (Public Private Partnership) were conducted 6 places with 282 participants from August 2010 to February 2011.

#### 5) Output 5: Communication and advocacy for TB control have been promoted.

Books, DVDs, posters, T-shirts as IEC materials for communication and advocacy for TB control were produced, printed and distributed in World TB day and other TB control activities.

#### 3-1-3. Malaria

# (1) Project Purpose: National malaria control has been strengthened.

-Evidence and findings from Outputs were utilized to improve National Malaria Control Program (NMCP) in "Standard Operation Procedure on drug and Supply Management National Malaria Control Program", "Myanmar National Strategic Plan for Malaria Prevention and Control 2010-2015" and "Strategic Framework for Artemisinin Resistance Containment in Myanmar (MARC) 2011-2015".

-Due to better health services provision, no. of malaria patients, severe/ complicated cases and death at the official hospitals in 2010 significantly decreased in comparison to average of 4 years (2006 to 2009) based on reports of official hospitals in one State and three Regions.

# (2) Outputs

# 1) Output 1: Capacity of health personnel on malaria control (reporting, supply, planning and epidemiological analysis) at Region/State, Township levels has been strengthened.

-All townships submitted monthly report regularly to State and Region, and all health facilities submitted monthly report regularly to township as of June, 2011.

-In Bago/East Region, 9 out of 14 Townships submitted to Malaria control micro-plans 2011 to Vector Borne Disease Control (VBDC) Bago Region.

# 2) Output 2: The community based malaria control program package has been effectively implemented in target area.

-Concerning "Early diagnosis (Malaria patients treated within 24 hours after onset of symptoms)" in 2010, 110,925 people (38.9%) within 24 hours and 174,138 people (61.1%) after 24 hours were examined in total and 43,768 (38.3%) and 70,483 (61.7%) were positive respectively .Indicator of bed

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#### net usage were not available.

**3)** Output 3: System for prediction and management of epidemics has been utilized in target area. Though early warning systems in targeted townships were developed, utilizing systems for prediction and management of epidemics have not been confirmed because outbreak of malaria in Myanmar during extension period of the Project has not been occurred.

4) Output 4: Collaborative activities with other partners and sectors have been strengthened.

-JICA expert discussed and exchanged the outcome of the Project with other development partners such as WHO, 3DF, UNICEF and Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) at TSG meeting and other partner meeting as much as possible.

#### 2 Summary of Evaluation Results

#### (1) Relevance: Very high

-HIV/AIDS control is one of the main target of MDG goal 6 and set a goal of "Have halted by 2015 and begun to reverse the spread of HIV/AIDS"

- -"National Health Plan 2006-2011" ranks HIV/AIDS, Malaria and Tuberculosis as top 3 priority diseases, and Myanmar Government published "Myanmar National Strategic Plan 2011-2015" on each HIV, Tuberculosis and Malaria in 2011.
- -The counterpart of the Project is NAP, NHL and NBC. NAP is the main implementing organization of HIV/AIDS Control, NHL is responsible for Quality Assurance of HIV Testing, and NBC is in charge of Blood Safety. Relevance of the Project Counterparts is high.

-Japanese Government decides to conduct any projects on BHN (Basic Human Need) to be directly benefited for Myanmar people, considering the progress and improvement of democratization and human rights situation in Myanmar. The Project is consistent with Basic Human Needs (BHN) because the Project meets three major infectious diseases control caused major prevalence and death in Myanmar.

#### (2) Effectiveness

#### 1) HIV/AIDS: Very high

Three Outputs such as (i) Enhancing blood safety for HIV and TTI (Output1), (ii) Improvement of EQA of HIV and TTI test (Output2), and (iii) Strengthening capacity of NAP staff contributed well the achievement of the Project Purpose.

2) Tuberculosis: Very high

Five Outputs such as (i) Capacity building for staff of central level (Output1), (ii) Improvement of TB laboratory services (Output2), (iii) Strengthening capacity of TB control and DOTS under "Stop TB Strategy" (Output3), (iv) Improvement linkage between Public sector and Private sector through partner's meeting at Region/District level (Output4), and (v) Promotion correct understanding for TB medical staff and TB patients (Output5) contributed well toward the achievement of the Project Purpose. 3) Malaria: Very high

Four Outputs such as (i) Capacity building for health personnel on malaria control (Output1), (ii) Improvement of community based control program package (Output2), (iii) Utilization of system for prediction and management of epidemics (Output3), and (iv) Collaborative activities with other partners and sectors (Output4) contributed well the achievement of the Project Purpose. As the results of the Project were utilized to strengthening NMCP, and supply management and reporting system was established, rates of morbidity and mortality in target areas were decreasing.

# (3)Efficiency

1) HIV/AIDS: Very high

Equipment was timely supplied by the Project except Serodia (HIV test kit) which was requested by DOH on May 2010 and those are efficiently utilizing at NHL and NAP. TOTs were conducted in 17 States/Regions and the participants of TOTs conducted cost-effectively trainings for medical technician/staff at lower level. Though only Japanese short-term experts were dispatched during the extension period of the Project, Counterparts and national project staff made efficiently and continuously considerable effort to implement the Project during Japanese short-term experts' absence.

2) Tuberculosis: Very high

Equipment was almost timely supplied by the Project and those are efficiently utilized by NTP. Although only short-term experts were dispatched for TB component, Counterparts and national project staff made efficiently and effectively considerable effort to implement the Project during their absence. 3) Malaria: Very high

Equipment, which had been chosen on familiar specification, was almost timely supplied by the Project and those are efficiently utilized. Though only Japanese short-term experts were dispatched during the extension period of the Project and some delay of activities were occurred by a mismatch on Japanese expertise between Myanmar and Japanese sides in the beginning of the Project, Counterparts, national project staff and one alternative Japanese expert made efficiently and effectively considerable effort to implement the Project.

# (4) Impact

1) HIV/AIDS: Very high

-Overall Goal is expected to be achieved in near future because (i) declining HIV prevalence of blood donors, and (ii) declining number of new HIV infections. Nevertheless, continuous coordination with donors and International NGO is extremely necessary for achievement of Overall Goal in Myanmar.

-SOP, which was drawn to strengthen the Basic Transfusion Service (BTS) and officially approved by MOH in March 2011, were distributed a lot of organizations / institutions concerned.

-Coordination and collaboration among NAP, NBC and NHL maintained in the extension period. No negative impact is observed.

-No negative impact is observed.

2) Tuberculosis: Very high

-Given the new data on much more prevalence of TB based on the last National Prevalence Survey, it is expected to increase a number of case detection on a short term basis. However, it would be achieved strengthening case detection and quality Directly Observed Treatment with Short-course Chemotherapy (DOTS) in the future.

-Though Radiologists and Counselors who don't belong to NTP, joined trainings as lecturers. In International Standard Tuberculosis Care (ISTC) training, Mandalay teaching hospital administrated by Ministry of Education will report TB patients to NTP. Collaboration among NTP and other organization has been actually enhanced.

-No negative impact is observed.

3) Malaria: Very high

-Overall Goal will be achieved because contents of guidelines produced by the Project have reflected Myanmar Strategic Plan on Malaria, technical guideline, etc.

-Training and utilization of Geographical Information System (GIS) was disseminated in other sectors.

-MOH understands malaria risk areas as prioritized and is conducting malaria control from viewpoints of

#### fairness.

- No negative impact is observed.

### (5) Sustainability

# 1) HIV/AIDS: High

-Myanmar Government recognizes importance of blood safety and NEQAS for preventing transmission by blood transfusion. Blood safety control is described in "Myanmar National Health Strategic Plan & Operation Plan on HIV/AIDS 2011-2015" and set a target that rate of HIV Screening test for Blood Donation reach to 100%. NAP, NHL and NBC have ownership respectively under MOH.

- -Counterparts of the Project understand medical skill and technical knowledge transferred by the Project and they may be necessary for updating latest technical knowledge. Using assistance of 3DF and WHO, MOH is able to conduct necessary operations and services.
- Although the financial situation, however, still remains unstable in long future, but NAP will provide necessary service to Myanmar people with assistance of other development partners as same as before.2) Tuberculosis: High
- -As Myanmar is one of the 22 TB high burden countries and Myanmar Government recognizes serious problem on public health, Government made "Myanmar National Health Strategic Plan & Operation Plan on Tuberculosis 2011-2015" and will continue to support TB control using support of GFATM, Three Diseases Fund (3DF), etc.
- -NTP has ownership to conduct a lot of activities and counterparts of the Project understand medical skill and technical knowledge transferred by the Project and can conduct training, lectures, etc.
- Although the financial situation, however, still remains unstable in long future, but NTP will provide necessary service to Myanmar people with assistance of other development partners as same as before.3) Malaria: High
- -Myanmar Government is sure to conduct NMCP because morbidity and mortality caused by malaria is one of serious problems in Myanmar. Government made "Myanmar National Health Strategic Plan & Operation Plan on Malaria 2011-2015".
- -As the contents/concept of results of the Project has been reflected into National Plan, various types of guidelines, etc., MOH is able to use prevention of malaria.
- -Though Counterparts workload is high, they have ownership to conduct activities of NMCP and are able to sustain skill and technical knowledge transferred by the Project.
- -Although the financial situation, however, still remains unstable in long future, but NMCP will provide necessary service to Myanmar people with assistance of other development partners as same as before.

# **3.** Factors that promoted realization of effects

# (1) Factors concerning Planning

The Project (Extension period) has been implemented in line with Myanmar National Health Policy/Program and Japanese ODA policy, based on the results of first 5 years of the Project (Phase I).

# (2) Factors concerning Implementation Process

The Project (Extension period) has been implemented in close collaboration with other development partners such as WHO. National project staff continuously conducted the activities of the Project by themselves, making contacts with Japanese Experts, even though JICA experts had not been dispatched during a few months from the beginning of the extension period of the Project.

# 4. Factors that impeded realization of effects

# (1) Factors concerning Planning

During a few months from the beginning of the extension period of the Project, JICA experts had not been dispatched. (Such delay of activities had been recovered by efforts of JICA experts and Counterpart.)

# (2) Factors concerning Implementation Process

The dispatch of some short-term experts delayed because visa recommendation letters from Myanmar side were not submitted on time.

# 5. Conclusion

-Project Purposes of three disease components have been mostly achieved, or on the process of achieving.

-As HIV/AIDS, Malaria and Tuberculosis as top 3 priority diseases are ranked in Myanmar, Purposes of the Project are appropriate for reducing morbidity and mortality of these diseases along "National Health Plan 2006

-2011" in Myanmar.

-Based on the results of the Project (Phase I), SOP and NQAS guideline had been made and distributed. It is necessary to expand more facilities to adopt SOP and guideline and monitor the activities of related facilities in line with SOP and guideline. Increasing coverage rate and monitoring the implementation based on SOP/guidelines which were produced in 2011 has been requested. In Syphilis, continuous supports to construct operate and manage blood transfusion screening & test system is still necessary

Concerning TB control, the Project is strengthening case detection through dispatching mobile-team and decentralization of TB lab function to station hospitals. as National Prevalence Survey revealed to exist more TB patients compared to initial estimation, strengthening further activities of detection cases by not only expanding activities started from Extension Period such as decentralization of TB Lab to Station hospitals, and out-reach activities to villages, but also introducing new approach like seeking PPP with pharmacies and community DOTS, etc.

-In Malaria, based on outcomes of the Project Phase 1 and Extension Period, further strengthening of capacity and implementation system of VBDC is needed to be able to expand nationwide by themselves. And continuous supports to MARC, which became serious problem in the extension period, have been needed.

# 6. Recommendations

# (1) HIV/AIDS

Coordination and collaboration among NAP, NBC and NHL should be maintained on advocacy, training, supervision and monitoring; and procurement and supply management of HIV test kits for Blood safety.

To NBC

- The reporting system on blood safety should be improved.

- The BTS performance based on Guideline and SOP should be monitored.

To NHL

- EQAS for HIV testing should be sustained.

- The development of EQAS for Syphilis testing should be prepared.

To NAP

- The enough amount of HIV test kit supply for blood safety, especially for 2012 and thereafter, should

### be ensured.

# (2) Tuberculosis (TB)

#### To NTP

-Together with quality DOTS expansion, the strengthening of case detection should be addressed based on the findings of the last National Prevalence Survey.

### (3) Malaria

# To VBDC

1) The Outcomes derived from the Project such as Township based malaria control, Pull type supply management system, Activities focusing on Socio-behavioral aspect and Information Management System including GIS should be expanded and replicated to other diseases control programs.

2) The Outcomes derived from the Project should be utilized and enhanced for further strengthening, especially Myanmar Artemisinin Resistance Containment Project.

#### 7. Lessons Learned

(1) Technical affordability

As the Project developed applicable models for large-scale measures, the results of HIV/AIDS, Tuberculosis and Malaria components have effects on National strategy/tactics beyond the targeted area of the Project.

(2) Sharing technical knowledge and system

The Project consists of three components such as HIV/AIDS, Tuberculosis (TB) and Malaria. Short-term experts in respective components have been dispatched in different times. It is necessary to share contents of technical trainings conducted by experts among not only JICA experts but also Counterparts of different institutions.

(3) Collaboration with development partners and INGOs

It is extremely important to share the information and discussion with development partners and INGOs for avoiding overlapped activities.