

Summary of Terminal Evaluation

I Outline of the Project	
Country : Myanmar	Project title : Major Infectious Diseases Control Project
Issue/Sector : Health Sector	Cooperation scheme : Technical Cooperation Project
Division in charge : Infectious Disease Control Division, Health Human Resource and Infectious Disease Control Group, Human Development Department	Total cost (estimated at completion of the Project) : 850 million yen
Period of Cooperation	R/D: From January 19, 2005 to January 18, 2010
	Partner Country's Implementing Organization : HIV: National AIDS Programme (NAP), National Health Laboratory (NHL), National Blood Center (NBC), Department of Health (DOH), Ministry of Health (MOH) TB: National Tuberculosis Control Programme (NTP), MOH Malaria: Vector Born Disease Control (VBDC), MOH
	Supporting Organization in Japan : HIV: International Medical Center of Japan (IMCJ) TB: Japan Anti – Tuberculosis Association (JATA) Malaria: Humanitarian Medical Assistance (HuMA)
	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
1. Background of the Project	
<p>In Myanmar, infectious diseases have been posing a serious threat to the population, among which HIV/AIDS, tuberculosis, and malaria being major causes of death are recognized as most significant to be tackled.</p> <p>In cognizant of the need to control HIV/AIDS, NAP was established in 1989 but its program operation and management capacity had been yet to be strengthened. Among HIV/AIDS related activities such as prevention and treatment, blood safety was identified as an unmet need, for which support from other development partners was next to nil.</p> <p>Myanmar has had a high prevalence of tuberculosis (TB), being one of the 22 high burden countries in the world according to WHO. Although the efforts of NTP resulted in full coverage</p>	

with DOTS strategy at the township level in 2003, keeping laboratory performance high and collaborating with general practitioners remained a challenge to further raise the CDR (case detection rate) and TSR (treatment success rate), especially in urban populous areas where many TB patients were estimated to be concentrated.

The burden of malaria has been also enormous, the reported number of malaria deaths in Myanmar accounting for 36% of the total reported malaria deaths in the area of WHO South-East Asia Region in 2006. The main causes include the inaccessibility and unavailability of early diagnosis and quality treatment, and the limitation in outreach activities of medical staff due to budget constraints. Given the scarce human and financial resources, there was a high demand in a community-based early diagnosis and treatment system.

Having faced with the great socio-economic burden of the three major infectious diseases, JICA assistance was requested, and hence commenced the project to control HIV/AIDS, TB, and malaria in January 2005. In the project formulation stage, IEC was identified as a cross-cutting activity that plays an important role for prevention and treatment of the three diseases but yet to be improved given the expertise and financial resources available in Myanmar. In this context, the Project put an emphasis on IEC activities particularly in the first few years.

The Project was an attempt to mitigate HIV/AIDS, TB, and malaria burden with a separate PDM for each disease. With the target area being all over the country, the HIV/AIDS component focused on blood safety by strengthening seven major general hospitals in each region, quality assurance of HIV test in laboratories, and capacity development of NAP staff. The TB component targeted at improving laboratory services, promoting Public Private Partnership (PPP), IEC activities and capacity development of staff and facilities in Yangon and Mandalay Divisions. The malaria component introduced a community-based malaria control package in Bago East and West Divisions by linking communities with the health facilities, establishing prediction and management of epidemics, and improving epidemiological analysis system and supply management system for efficient use of drugs and equipment.

2. Project Overview

2-1. HIV/AIDS

(1) Overall Goal

HIV transmission is reduced nationwide.

(2) Project Purpose

National AIDS Program is strengthened.

(3) Outputs

- 1) Blood safety for HIV is enhanced.
- 2) Quality Assurance of HIV test is improved.
- 3) Capacity of National AIDS Program is improved.

(4) Inputs

Japanese side: Long-term Expert: 1 person, Short-term Experts: 13 persons in total, Training in Japan: 9 persons, Training in Thailand: 46 persons, Provision of equipment: US\$ 1,351,000,

Local cost expenditure: US\$ 168,000

Myanmar side: Assigning counterpart personnel, Provision of land and facilities: office spaces, Local cost expenditure

2-2. Tuberculosis

(1) Overall Goal

New TB infection is controlled in Yangon and Mandalay Divisions.

(2) Project Purpose

TB control in Yangon and Mandalay Divisions is improved.

(3) Outputs

- 1) Capacity for program management and epidemiological data management for TB control is strengthened.
- 2) TB laboratory services are improved.
- 3) Monitoring and supervisory capability for TB control is strengthened.
- 4) Public Private Partnership is established in the selected sites.
- 5) Communication and advocacy for TB control is promoted.

(4) Inputs

Japanese side: National consultant: 1 person, Long-term Expert: 1 person, Short-term Experts: 19 persons in total, Training in Japan: 6 persons, Provision of equipment: US\$ 894,000, Local cost expenditure: US\$ 353,000

Myanmar side: Assigning counterpart personnel, Provision of land and facilities: office spaces, Local cost expenditure

2-3. Malaria

(1) Overall Goal

Malaria control is strengthened beyond the project sites.

(2) Project Purpose

National malaria control is strengthened.

(3) Outputs

- 1) Community based malaria control program is effectively introduced in selected areas.
- 2) Collaboration between communities and health facilities is improved in selected areas.
- 3) System for prediction and management of epidemics is established.
- 4) Epidemiological analysis system is improved.
- 5) Regional collaborative activities are strengthened.
- 6) Operational and applied field researches effectively contribute for outputs.

(4) Inputs

Japanese side: Long-term Expert: 1 person, Short-term Experts: 12 persons in total, Training in

Japan: 10 persons, Provision of equipment: US\$ 662,000, Local cost expenditure: US\$ 295,000
Myanmar side: Assigning counterpart personnel, Provision of land and facilities: office spaces, Local cost expenditure

2-4. Inputs for project management and IEC

Japanese side: Long-term Expert: 4 persons, Short-term Experts: 2 persons in total, Training in Japan: 1 person, Provision of equipment: US\$ 31,000, Local cost expenditure: US\$ 298,000

Myanmar side: Assigning counterpart personnel, Provision of land and facilities: office spaces, Local cost expenditure

2-5. Overall Inputs

Japanese side: Long-term Experts: 9 persons in total, Short-term Experts: 44 persons in total, Training in Japan: 26 persons, Training in Thailand: 46 persons, Provision of equipment: US\$ 2,938,000, Local cost expenditure: US\$ 1,114,000

Myanmar side: Assigning counterpart personnel, Provision of land and facilities: office spaces, Local cost expenditure

II Evaluation Team

Members of Evaluation Team	Assignment	Name	Organization / Institution
	Team leader	Dr. Mitsuhiro Ushio	Executive Technical Advisor to the Director General Human Development Department, JICA
	HIV/AIDS Control	Dr. Tamotsu Nakasa	Director, 2nd Expert Service Division, Bureau of International Cooperation, International Medical Center of Japan (IMCJ), Ministry of Health, Labor & Welfare
	TB Control	Dr. Toru Mori	Director Emeritus, The Research Institute of Tuberculosis (RIT), Japan Anti-Tuberculosis Association (JATA)
	Malaria Control	Dr. Yasuhiko Kamiya	Professor, Center for International Collaborative Research, Nagasaki University
	Planning Cooperation	Ms. Yukari Horii	Program Officer, Infectious Disease Control Division, Human Development Department, JICA
	Evaluation & Analysis (HIV/TB)	Mr. Masahiro Oseko	Chief Executive Officer Nevka Co., Ltd.
	Evaluation &	Mr. Shuichi	Manager

	Analysis (malaria)	Suzuki	Fujita Planning Co., Ltd.
Period of Evaluation	From July 1, 2009 to August 1, 2009		Type of Evaluation : Terminal Evaluation
III Results of Evaluation			
3-1. Achievement			
3-1-1. HIV/AIDS			
(1) Project Purpose: National AIDS Programme has been strengthened.			
<p>According to the data of “Report of the HIV Sentinel Sero-surveillance Survey 2008 Myanmar, NAP, March 2009,” HIV prevalence of blood donors has descended to 0.4%, which shows that the Project Purpose has been achieved. Looking into each of the seven major General Hospitals, the target of the Project Purpose (< 0.5%) has been achieved in Yangon, Mandalay, Taunggyi and Mawlamyine, but not in Patheingyi, Myittha and Magway.</p>			
(2) Outputs			
1) Output 1: Blood safety for HIV has been enhanced.			
<p>In total, 152 hospitals introduced the standardized blood donor deferral as of July 2009. In terms of the number of States and Divisions, 11 out of 17 States and Divisions introduced the standardized blood donor deferral with the population coverage of 73%. Concerning the questionnaire for blood donor deferral, all of the 31 State/Division Hospitals including seven major General Hospitals introduced the standardized blood donor deferral questionnaire.</p>			
2) Output 2: Quality Assurance of HIV test has been improved.			
<p>The number of laboratories participating in EQA (External Quality Assurance) introduced by the Project constantly increased from zero to 256 as of July 2009. This covers 65% of the laboratories for blood safety, 82% for PMCT (Prevention of Mother to Child Transmission) and 93% for VCCT (Voluntary Counseling & Testing). The number of laboratories without submission of test results has been fluctuating at around 5%, and the number of aberrant test results has been fluctuating at around 10%. During the Project period, 66 out of 190 EQA participating laboratories received supervision. As a result of supervisory visits, aberrant test results decreased in 19 laboratories out of 25 laboratories supervised with high priority, or 76% (19/25) of supervised laboratories made improvement.</p>			
3) Output 3: Capacity of National AIDS Program has been improving.			
<p>The Project provided a number of opportunities for capacity development of the NAP staff.</p> <ul style="list-style-type: none"> ➤ TOT (training of trainer) courses on program management were conducted in Thailand in collaboration with HIV Regional Coordination Center (RCC) Project in 2005, 2006 and 2007, in which a total of 46 participants from 16 States and Divisions joined. In-country multiplier training was held in 2005 as a continuation of TOT from RCC, in which 27 Medical Officers and AIDS/STD Team Leaders participated. ➤ Pre-service training for newly recruited staff was carried out in 2008 with the recommendation of the Project, in which 29 participants participated, covering all the newly assigned NAP staff. Since the human resource shortage is a serious issue for NAP, 			

the pre-service training proved highly significant.

- The Project provided support to a proposal-based small-scale project. For instance, one of the proposals made by the AIDS/STD Team Leader in North Okkalapa Township was selected and implemented with financial support of the Project. The study result of the small-scale project was presented at the Myanmar Health Research Congress 2008 and awarded as the second best presentation. Furthermore, it is planned that NAP staff will make a presentation at ICAAP (International Congress on AIDS in Asia and the Pacific) in Bali, Indonesia in 2009.

3-1-2. TB

(1) Project Purpose: TB control in Yangon and Mandalay Divisions is being improved.

The target of CDR over 70% has been achieved. On the other hand, the target of CR (cure rate) over 85% has not been achieved, but it has been increasing, indicating the improvement of the situation. While the PDM (project design matrix) of the Project employed CR as an indicator of the Project Purpose, TSR is widely used as an indicator of improvement of DOTS instead of CR by WHO and other development partners. Taking TSR into consideration in this Project, the global target of 85% was achieved both in Yangon and Mandalay Divisions in 2007 and it has been stable, showing the steady improvement of TB control.

(2) Outputs

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

Capacity of NTP staff for program management and epidemiological data management for TB control has been strengthened through trainings and operational research activities among others. Renovation of facilities and provision of equipment have also helped the improvement of the performance of NTP. The outcome of operational research activities were presented in international conferences and publications, which by itself contributed to the capacity development of the NTP staff as well.

2) Output 2: TB laboratory services are being improved.

Quality of TB laboratories has been improved through training courses including new-recruit training, refresher training and EQA (external quality assurance) training together with the provision of laboratory equipment such as microscopes. The effects of these training courses were observed by comparing the proportion of major errors made by the EQA model centers supported by the Project with that of the other centers with no Project intervention. EQA using LQAS (lot quality assurance sampling) has been widely introduced to all laboratories in the country by NTP with the financial assistance from 3DF (three diseases fund).

3) Output 3: Monitoring and supervisory capability for TB control is being strengthened.

Monitoring and supervision systematically conducted by NTP with the assistance of the Project has greatly contributed to laboratories improving their performance. The effect of monitoring and supervision was evident in the number of major errors found by EQA.

4) Output 4: Public Private Partnership is being established in the selected sites.

PPP activities such as advocacy meetings and trainings on PPP-DOTS were conducted in

two pilot townships in Yangon and Mandalay Divisions. Although the number of referrals from private sectors has not increased, the Project has made a notable contribution by pioneering PPP activities in pilot townships making initial prototype of implementation methods and procedures.

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

A wide variety of IEC materials such as TB patient care book, PPP pamphlets, EAS SOP, AFB Microscopy Guidebook and sputum collection posters and pamphlets were produced and distributed widely not only in Yangon and Mandalay Divisions but also in other areas. “TB Patient Care Book” in Myanmar language, for instance, have been produced in volume of 30,000 to 50,000 copies every year since 2005, and systematically distributed to the project sites, i.e., all the townships in Yangon and Mandalay Divisions. At present, using other fund such as 3DF, the care book is distributed nationwide.

3-1-3. Malaria

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

The Project proved that community-based malaria control was effective and efficient in reducing malaria morbidity and mortality in Bago East and West. The achievement has received sufficient recognition at the national level, as the concept of community-based –specifically township-based approach—is planned to be adopted and included in the “National Strategic Plan for Malaria Prevention and Control 2010-2015” (draft).

(2) Outputs

1) Output 1: Community based malaria control program was effectively introduced in selected areas.

The Project developed a package of community-based malaria control encompassing different dimensions of malaria control activities, ranging from EDPT (early diagnosis and proper treatment), epidemic prevention, logistics management, to monitoring and evaluation. The package demonstrated how to implement community-based malaria control with effectiveness and efficiency in Bago East and West, where malaria morbidity and mortality were dramatically reduced.

2) Output 2: Collaboration between communities and health facilities was improved in selected areas.

While the total cases remain unknown, the number of suspected cases accessing health facilities in Bago East and West has kept growing since the onset of the Project, a consequence of which is the increase in the number of patients treated in accordance with the National Treatment Policy. On the other hand, severe and complicated cases and death cases in target areas decreased between 2004 and 2008, which is assumed to be made possible due to EDPT.

3) Output 3: System for prediction and management of epidemics has been established.

A hazard map to indicate epidemic-prone areas was developed for the Project sites. The locations of epidemic-prone areas such as development project sites in each township are updated on the micro planning workshop. Some townships started to conduct collaboration activities with the development projects, a sign of the establishment of prediction system

and epidemics management. Furthermore, the logistic management system in 16 pilot townships has not only made the utilization and distribution of malaria control equipment efficient, but also functioned as an early warning system.

4) Output 4: Epidemiological analysis system has been improved.

GIS was introduced through in-country training and inter-country training in collaboration with WHO, covering 6 states and divisions in 2005, 11 in 2006, and 17 in 2007 and 2008. GIS has been effectively employed by VBDC staff at the state/division level for epidemiological data analysis and presentations.

5) Output 5: Regional collaborative activities were strengthened.

Through training courses and meetings, the Project contributed to the regional effort of malaria control by sharing information among VBDC staff and collaborating with other development partners. In connection with other outputs, a number of trainings were conducted, among which noteworthy are a meeting on “Revised Malaria Control Strategy and its Implementation” held by SEARO in 2007.

6) Output 6: Operational and applied field researches effectively contributed to outputs.

Different operational research activities were conducted to provide evidences and findings. Most significant is the one on the analysis of forest-related malaria, which discovered that many malaria patients were adult males in forest-related work in the target areas, implying possible collaboration with stakeholders in other sectors; in this case, the Forest Department. The finding reminded the Project of the importance of operational research that looks into epidemiology and social customs at a local level and made a significant impact on the project intervention.

3-2. Summary of Evaluation Results

3-2-1. HIV/AIDS

(1) Relevance: Very High

The Project is aligned with the national policies and priorities. The burden of HIV/AIDS, TB and malaria has received significant recognition as major infectious diseases to be tackled, as documented in the “National Health Plan 2006-2011” by the Ministry of Health of Myanmar. In particular, it is noteworthy that the Project targeted the area of blood safety where other support was none but the need was considerable as the National Health Plan stating “to prevent transmission of HIV through hospital setting including blood transfusion” being one of the “Specific Objectives” on HIV/AIDS control.

Across the three diseases, the importance of technical cooperation is widely recognized in complementing support from other development partners which is mostly provision of equipment and drugs. The Project filled the unmet need for capacity development and health system strengthening of the Ministry of Health from the national level to the township level.

Furthermore, the Project is consistent with Japanese ODA policy for Myanmar which focuses on humanitarian assistance. It also fits with JICA’s policy on human security and contributes to achieving the Millennium Development Goals.

(2) Effectiveness:

[HIV/AIDS] High

According to the data of “Report of the HIV Sentinel Sero-surveillance Survey 2008

Myanmar, NAP, March 2009,” HIV prevalence of blood donors declined to 0.4%, which shows that the Project Purpose fulfilled. The Project has contributed to it by introducing standardized registration and questionnaire for blood donor deferral, improving blood laboratory services through the introduction of EQA and monitoring and supervision, and developing capacity of NAP through a variety of training programs and support to proposal-based small scale projects.

[TB] High

The Project Purpose is being achieved with the international targets of CDR being over 70% and TSR over 85%. While the target of CR (>85%) has not been achieved, the trend of it has been ascending indicating the improvement of the situation. The Project has contributed to it by developing the capacity of NTP staff through trainings and operational research projects, improving TB laboratory services through training courses including new-recruit training, refresher training and EQA training together with the introduction of EQA-LQAS system and monitoring and supervision, promoting PPP, and producing and distributing a wide variety of IEC materials.

[Malaria] Very high

“National Strategic Plan for Malaria Prevention and Control 2010-2015” (draft) has a concept of Community Based Malaria Control mentioned, indicating the recognition of the achievement of the Project and the possibility of its expansion to other areas. Further, “the External Review for Malaria Control Programme” attended by a Project expert was reflected on the “National Strategic Plan for Malaria Prevention and Control 2006-2010”, a product of collaboration with NMCP, WHO, UNICEF and JICA among others, with respect to EDPT, prevention by ITN, surveillance and information system, IEC activities and community participation.

(3) Efficiency:

[HIV/AIDS] High

The Project has made careful considerations for cost efficient approaches such as personnel training in Thailand –as opposed to training in Japan which is more costly-, an introduction of blood donor registration using not only a computerized system but also a manual registration format, and the provision of HIV test kits which can be used without electricity. In order to make up for the absence period of a Japanese expert, the Project developed the capacity of a national project staff member, who coordinates the activities under the Project supervision.

[TB] High

With all Japanese experts dispatched on a short-term basis, the Project has assigned different coordination tasks to a highly capable national consultant, who has made a great contribution to the Project. This input proved highly efficient and effective.

[Malaria] High

Micro-stratification, a method introduced by the Project, has allowed NMCP to allocate limited resources to areas in greatest need depending on the level of malaria endemics, which helped avoiding over-supply of materials, making the resource allocation efficient. The logistics system initiated by the Project also encouraged efficient use of resources by

minimizing the over-supply and lack of supply of equipment.

(4) Impact:

The Project intervention enabled detailed disease-specific data to be accumulated, compiled and shared by stakeholders, quite a few of which was utilized in drafting proposals for Global Fund Round 9. With regard to TB and malaria, the Project proved successful in making an impact on inducing the Japanese Grant Aid projects for malaria equipment and anti-TB drugs. Other major impacts for each disease are as follows:

[HIV/AIDS] High

The questionnaire for blood donor deferral introduced by the Project includes information not only of HIV/AIDS but also of hepatitis B, hepatitis C, syphilis and malaria, which allowed the Project to play a pioneering role in the area of “blood safety” in general beyond disease-specific control.

[TB] High

In addition to EQA model centers in Yangon and Mandalay, and some other laboratories supported by the Project, NTP introduced LQAS in other areas with the assistance of 3DF. As a result, all of the TB Microscopy Centers including private laboratories and INGOs’ laboratories at the township level in the country have introduced LQAS by now.

[Malaria] High

UNICEF took up the community-based approach of the Project and applied “micro-stratification” to 80 townships throughout the country for efficient distribution of bed nets. This is a prime example where another donor found fundable a mechanism introduced by the Project in a target area, and expanded it to a larger area.

(5) Sustainability: Fair

The counterparts of the Project are national programmes targeting each disease and the Project activities are being embedded into the national system. The counterpart personnel are devoted for its mission and it is predicted that the government system and human resources the Project has supported will be sustainable after the end of the Project.

Given the fact that the national budget for health sector is extremely limited, however, concerns remain for securing equipment and drugs necessary for each disease. The Global Fund is expected to come back, but the dependency on donor support will continue unless any major change occurs.

In terms of human resources, the prospect is not bright either. The health providers at the community level seem overburdened as decentralization progresses, while in the midst of alternation of generations and brain drain to the private sector and overseas, the central and the state/division level are overcast with insufficient manpower and the lack of knowledge and experiences required to perform the given tasks.

3-3. Factors that promoted realization of effects

(1) Factors concerning Planning

The Project has been implemented in line with the national programmes.

(2) Factors concerning Implementation Process

The Project has been implemented in close coordination with other development partners

such as WHO.

The Project is based upon trust and relationship with the counterparts which is nurtured by Japanese assistance in the past.

3-4. Factors that impeded realization of effects

(1) Factors concerning Planning

Not having been revised in accordance with the progress of the Project, the PDMs lacked necessary information for evaluation such as the target level of the indicators.

(2) Factors concerning Implementation Process

There was a difficulty in various administrative procedures in implementing the Project.

3-5. Conclusion

Across the three diseases, Project Purposes have been mostly achieved, or in the process of achieving.

The HIV/AIDS component focused on blood safety by introducing donor registration and donor deferral system, expanding EQA at HIV/AIDS laboratories, and increasing the capacity of NAP staff. The next step is to rebuild the NAP personnel and reinforce the monitoring and supervision activities in larger areas. In the bigger picture of HIV/AIDS control in general, the issue of ART for HIV patients remains.

The TB component helped develop management capacity of the NTP staff, improve EQA using LQAS, promote PPP and strengthen monitoring and supervision system. Adding to these activities, more case detection and treatment is necessary deep down at the community level, especially in the hard-to-reach areas through PPP and other measures.

The malaria component has been successful in developing a community-based malaria control package in the target area. It is expected that the model will be expanded to other areas, for which tailoring the model to the local needs would be essential. It is also paramount to secure sufficient budgets for equipment, monitoring and outreach activities in peripheral areas.

The need of equipment and drugs necessary for each disease will be met by Global Fund for the time being if approved, but given the dependency on donor support, the long-term prospect remains uncertain. The human resources are even more severe, and thus the effort for training health personnel and developing the capacity of the staff should be given the highest priority.

3-6. Recommendations

3-6-1. HIV/AIDS

To NAP, NBC and the Project

(1) To carry out further investigation to identify the causes behind the exceptionally high HIV prevalence of blood donors in some hospitals in order to come up with further effective intervention.

To NAP

(2) To prepare the proposal for Global Fund Round 10 including the budget for HIV test kits.

With the increase of the budget of 3DF, HIV test kits would be secured for another two years until the middle of 2011. However, the situation after 2011 still remains unstable.

3-6-2. TB

To NTP and the Project

- (1) To improve information system related to EQA on TB laboratories and to develop information sharing system among stakeholders.
- (2) To publish the revised version of “PPP National Guidelines” as early as possible in order to formulate and disseminate standardized methods and procedures of PPP.

3-6-3. Malaria

To VBDC, DOH and the Project

- (1) To transfer monitoring and reporting skills for logistics management to Divisional VBDC team, so that the logistics model for early diagnosis and prompt treatment at the community would be sustainable after the termination of the Project.
- (2) To expand community based malaria control approaches developed by the project to other malaria endemic areas including the sites of Japanese Grant Aid.

3-7. Lessons Learned

- (1) Operational researches proved very important in carrying out the Project to maximize its effectiveness and efficiency.
- (2) National staff/consultants made notable contributions to the Project, particularly for the coordination of stakeholders and for facilitating administrative procedures.
- (3) PDM should have well-defined qualitative and quantitative indicators with the target level set, and should be revised in a timely manner in accordance with the progress of the project.