Terminal Evaluation

Africa

1. Outline of the Project

Country:
United Republic of Tanzania

Project title:
Malaria Control Phase II

Issue/Sector:
Health/Medical Care

Cooperation scheme:
In-country Training

Division in charge:
Africa Division, Regional Department IV(Africa,Middle East and Europe)

Total cost:
53 million yen

Period of Cooperation Fiscal Year 1998 - 2000 (Extension period) Fiscal Year 2001 - 2002

Partner Country's Implementing Organization:
The National Malaria Control Programme, Ministry of Health

Supporting Organization in Japan:

Related Cooperation:

1-1 Background of the Project

In United Republic of Tanzania, as it has inadequate of the countermeasures to cope with malaria-carrying mosquitoes, prevention, diagnosis, and treatment techniques of Malaria, many people died of Malaria, and which has been the most leading cause of diseases.

Under the circumstance, The Government of Tanzania requested the Government of Japan to support the in-country training which aimed at fostering the necessary health workers related to Malaria countermeasures. Upon the request, the Government of Japan started to support the implementation of the training in the fiscal year 1993 (Phase I; a five-year program in FY1993 and Phase II; a five-year program in FY1998).

From the second year of Phase I, the training for the laboratory technicians, laboratory assistants and nurses in Tanzania has been implemented to develop their capacities in examination techniques by the Acridine Orange (AO) method which is one of the diagnosis methods of Malaria and nursing care management of Malaria patients. In Phase II, similar training has also been carried out. This evaluation covers the Phase II activities.

1-2 Project Overview

To solve the medical issues related to Malaria in Tanzania, the project implemented the in-country training to transfer the examination techniques by AO methods which was one of the diagnosis methods to the laboratory technicians, assistants and nurses, and to develop capacity in nursing care management of Malaria patients.

(1) Overall Goal

The specific Malaria mortality rate is reduced.

(2) Project Purpose

1) The improved and strengthened capacity of health facilities are demonstrated in the laboratory diagnosis of Malaria using the AO method.
2) The improved and strengthened capacity of health facilities is demonstrated in the nursing care management of severe Malaria and other common severe childhood illnesses.

(3) Outputs

1) Trained laboratory technicians acquire adequate knowledge and skills to diagnose Malaria by means of the AO method.
2) Trained laboratory assistants acquire adequate knowledge and skills to diagnose Malaria by means of the AO method.
3) Trained nurses improve their knowledge and skills in the care management of severe Malaria and other common severe childhood illnesses.

(4) Inputs

Japanese side:

Long-term Expert	1(not full-time worker)	Equipment	2 million yen
Short-term Experts	2	Local Cost	51 million yen

Tanzanian side:

Land and Facilities	
Local Cost	52.255 million tsh. (7 million yen)

2. Evaluation Team

Members of Evaluation Team

Team Leader/General: Katsuhiko OZAWA, Director, Planning Division, Regional Department IV (Africa, Middle East and Europe), JICA
Analysis on Malaria Control Effectiveness: Hiroshi TAKAHASHI, Senior Advisor (Public Health Medicine), JICA
Evaluation Planning: Kaori, NISHIYAMA, Associated Expert, Africa Division, Regional Department IV (Africa, Middle East and Europe), JICA
Evaluation Analysis: Shogo KANAMORI, Researcher, IC-Net Limited

Period of Evaluation 22 February 2003 - 14 March 2003

Type of Evaluation:
Terminal Evaluation

3. Results of Evaluation

3-1 Summary of Evaluation Results

(1) Relevance

In Tanzania, many people die of Malaria every year and it was regarded one of the major issues for the Tanzanian government to decrease the death rate caused by Malaria. The importance and necessity of early diagnosis and early cure of Malaria patients were confirmed at the provincial and district medical facilities. Implementing the training to realize the decrease of Malaria cases is consistent with the needs of medical facilities in Tanzania. Judging from the above, both the overall goal and project purpose are relevant.

(2) Effectiveness

As for one of the outputs, , 242 laboratory technicians and assistants attended the training courses on knowledge and techniques about AO methods to diagnose Malaria by means of this particular method, and their knowledge and technical levels were improved to a certain degree. According to the surveys in 1999 and 2002, the usage rate of the donated microscopes for the AO method at the medical facilities was 70% and 73% respectively. It was identified by the surveys that the implementation of the training program targeting laboratory technicians and assistants effectively disseminated AO methods in Tanzania. Judging from the above, the original purpose was mostly accomplished.

Another output that nurses improve their knowledge and skills in the care management of severe Malaria and other common severe childhood illnesses was attained as follows. The number of nurses who joined the training for five years was 277, and it was confirmed that their knowledge and skills were upgraded after the training. Most of the nurses who were subjects of the survey (5% of the 277 ex-participants) answered that they utilized their acquired knowledge and skills at their workplaces by

organizing specimen for the AO method, confirming contents of prescriptions and dosing quinine correctly and distributed them to their colleagues and doctors. From this, it can be gathered that the planned output concerning the training for nurses was mostly accomplished.

(3) Efficiency

The training program was operated efficiently with the initiative of the Tanzanian government and the selection of the lecturers, participants. The contents of the training were also mostly appropriate. The donated equipment for the training by the Japanese side in 1998 was fully utilized during the training, and thus was judged to be appropriate. On the other hand, it would be more efficient to disseminate the AO method if more experts are dispatched after the long-term experts involved in general health and medical cares (health care cooperation plan) to instruct appropriate countermeasures to a variety of subjects at the medical facilities and the Tanzanian government

(4) Impact

The impact of the project was not measurable at the terminal evaluation. In the meantime, there were some positive ripple effects to the Tanzania policy: (1) The introduction of the AO method reduced the number of patients waiting for results of Malaria examination at some medical facilities and (2) the knowledge on appropriate quinine intravenous and intramuscular injection methods was spread while inappropriate injection methods were improved at some medical facilities. The Tanzanian government adopted the AO method as the country's standard technique in laboratory diagnosis of Malaria in 1999, which affected the policy aspect of the government.

(5) Sustainability

The Tanzanian government announced its political support to Malaria control such as early diagnosis and early treatment of Malaria patients, and the government will continue working on the policy.
As for a technical point of view on the AO method, future sustainability is expected because many ex-participants have already transferred the acquired skills to their colleagues, such as laboratory technicians and assistants who had not joined the training at many medical facilities. Meanwhile, organizational development is one of the issues of the training for the sustainability of the AO method because the maintenance system of microscopes and the supply system for consumables such as tungsten halogen lamps were not engineered well enough.

Ex-participant nurses disseminated the acquired knowledge and skills to their colleagues at their workplaces through their daily works. However, only a few medical facilities disseminated knowledge and skills systematically or continuously implemented seminars or on-site training. For the sustainability of the training effects, it is necessary to develop the system with which the acquired skills can be transferred and knowledge and skills can be shared at medical facilities.

As for the financial aspect, it is possible to purchase the expendable supplies for existing AO microscopes and to support on-site training for nurses by utilizing donor funds (basket funds) and financial resources of the Tanzanian government in the future. However, if financial resources are limited to the level mentioned above, it is difficult to continue implementing the training within the scope of this project.

3-2 Factors that promoted realization of effects

(1) Factors Concerning the Planning

N/A.

(2) Factors concerning the Implementation Process

1) Textbooks were written in their native language and revised with proper timing and the contents of the training and selection of lecturers were appropriate. These factors led to the successful improvement of the knowledge and skills of the participant.
2) The training courses and monitoring were appropriately introduced, and effective feedbacks of monitoring results contributed to the improvement of the training program in the following fiscal year.
3) As it was easy to acquire the skills of the AO method, ex-participants smoothly transferred their acquired skills to their colleagues (laboratory technicians and assistants) who had not joined the training at medical facilities.
4) In some provinces, the director of the clinical examination department actively visited provincial or district hospitals and offered instruction which contributed to the continuity of the utilization of the AO method.

3-3 Factors that impeded realization of effects

(1) Factors Concerning the Planning

N/A

(2) Factors concerning the Implementation Process

1) As for the training of laboratory technicians, there were some concerns as follows: The organizational repairing system and national repairing techniques were not sufficient and the supply system for consumables such as the tungsten halogen lamps were not of satisfactory quality.
2) As for the training of nurses, it is favorable that trained nurses disseminate the effects of the training to their colleague nurses at their workplaces. However, there was no system to transfer knowledge and skills while only a few effects were observed, and these effects of the training were limited.
3) Experts sensibly monitored the accomplishment level of the project purpose and proposed to the Ministry of Health about the improvement of the disseminating status of the AO method. However, not enough countermeasures were implemented to solve the problem. It would have been more effective if the experts were dispatched separately in order to give advice and instructions to solve these problems separately and effectively.

3-4 Conclusion

The training program to cope with Malaria was appropriately in line with the policies and needs of the Tanzanian government. The implementation of the Training was an effective measure to strengthen the capabilities of laboratory technicians, assistance and nurses. There may be more appropriate form of inputs by Japanese experts, however other forms of inputs to the training were mostly appropriate. The training program was efficiently implemented as a whole, and the original purpose was mostly accomplished. With policy support, future progress in the training effects is expected. In the meantime, the maintenance system of microscopes, the supply system for consumables such as tungsten halogen lamps and the implementation system of local training for nurses were not established to satisfactory levels, and the organizational development on Malaria diagnosis and treatment services will be the key to the sustainability of the training effects for the future.

3-5 Recommendations

(1) Malaria is still one of the major fatal diseases in Tanzania, and the Tanzanian side still shows strong desire for support from Japan. Therefore, it is recommended that the training of the AO method and training for nurses are continued.

(2) It is judged that the training for the AO method can be introduced to the health centers which are lower medical facilities than regional and district hospitals. Therefore, in the support activities in the future, the AO method should be introduced to the health centers.

(3) The microscopes which were donated at Phase I will be soon reach the end of its lifespan. Therefore, the Japanese side should donate microscopes to replace the broken ones.

(4) If the project is continued, it is desirable that the Tanzanian side makes efforts to reform the system among nurses, doctors and laboratories by making the accomplishment of early diagnosis and early treatment its clear objectives. For example, applying the AO method in order to deliver examination results to patients earlier and starting the treatment sooner.

3-6 Lessons Learned

In case of the implementation of the local in-country training for the workers at medical facilities, it is favorable to make efforts to organize a system that helps the participants disseminate the acquired techniques at their working places.

3-7 Follow-up Situation

Upon the recommendation mentioned above in 3-5, the government of Japan will continue to cope with Malaria as the Integrated Malaria Control Project. This will include cooperation with health centers.