I. Project Outline

Background

Solomon Islands were malaria endemic areas and the Malaria Eradication Plan was implemented under the support of the donors, including the World Health Organization (WHO). As a result, the malaria infection rate has been in a downward tendency. However, the malaria control activities were suspended by the outbreak of ethnic conflict in 1998. Since 2000, the number of malaria infection has increased in Guadalcanal Province and Malaita Province. Also, the fiscal difficulty and the breakdown of the health system caused by the conflict as well as the large scale migrations expanded the malarial infection risk in the country. On the other hand, the low level of medical service and underdeveloped infrastructure including roads increased severity of malaria and made difficulties to cope with severe malaria patients. Therefore, control of severe malaria through adequate examination, diagnosis and care at primary medical institutions where malaria patients firstly visit was a key issue for the country.

Objectives of the Project

1. Overall Goal: Effective management system of malaria cases is established in Solomon Islands.
2. Project Purpose: Effective management system of malaria cases is established in Guadalcanal Province and Honiara City.
3. Logical flow of how the project responses to development issues:
   The project delivers trainings for nurses, assistant nurses and microscopists and provides necessary equipment for diagnosis and treatment of malaria. By implementing activities to utilize the Solomon Island Malaria Information System (SIMIS) and to introduce Community Based Malaria Prevention (CBMP), the project aims at establishment of a model of improved methodologies for malaria care and prevention in the target areas as well as dissemination of effective system of malaria care and prevention in the entire country.

Project Information

1. Project site: Guadalcanal Province and Honiara City
2. Main activities: Provision of medical equipment for malaria diagnosis and care, trainings for microscopists, nurses and assistant nurses, development of manuals and delivers of trainings for utilization of SIMIS, public awareness workshops for malaria prevention activities, fostering the health community volunteers, and so on.
3. Inputs:
   Japanese Side
   1) Experts: 36 for short-term
   2) Trainees received: 22 persons
   3) Equipment: Vehicles, microscopes, medical equipment, PC projector, etc.
   Solomon Side
   1) Staff allocated: 36 persons
   2) Land and facilities: project office and costs for electricity and water supply

Project Period


Project Cost

274 million yen

Implementing Agency

Ministry of Health and Medical Service (MHMS), National Vector Borne Disease Control Program (NVNBDCP), Guadalcanal Province Health Office (GHPO), Honiara City Council (HCC)

Cooperation Agency in Japan

University of Kobe, IC-Net Limited

Related Projects

Japan’s cooperation: (GA: Grant Aid, TC: Technical Cooperation)
   ・The Project for Strengthening of Malaria Control System Phase II (TC, 2011-2014)
Other donors’ cooperation:
   ・Malaria Action Plan (WHO, AusAID, Secretariat of the Pacific Community, the Global Fund for Fight AIDS, Tuberculosis and Malaria (GFATM) (2008-2014)
   ・The Solomon Islands Health Sector Project (World Bank, 2008-2011)
   ・The Malaria Control Transfer Plan (AusAID, 2012-2014)

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with the Solomons’ development policy, such as reduction of malaria infection rate and mortality rate specified under “the National Health Plan (2004-2005)”, “the Solomon National Health Strategic Plan (2006-2010)” and “the National Malaria Strategic Plan (2007-2016)”, and development needs to control severe cases of malaria, as well as Japan’s ODA policy prioritizing support for sustainable development (health and medicine, education, infrastructure and industrial promotion), including improvement of health and medical services. Therefore, relevance of this project is high.

2 Effectiveness/Impact
The project aimed at improvement of the malaria diagnosis and care system through installation of equipment for malaria diagnosis and care and trainings for nurses, assistant nurses and microscopists as well as IEC (Information, Education and Communication) about malaria control for the local people and communities in the pilot areas. As a result, in the pilot areas of Guadalcanal Province and Honiara City, the malaria morbidity and the number of severe malaria cases considerably decreased from 2004 before starting the project to 2012. Also, the recovery rate of patients hospitalized in the National Referral Hospital (NRH) had been maintained at more than 90% for the project period. Also, according to the satisfaction survey in three regions of Guadalcanal Province conducted during the project implementation, around 70% of the patients were satisfied with almost all items of services in Honiara region and Weather Coast region and 50% of patients were satisfied in Terere region.

As for the Overall Goal, the project aimed at reduction of morbidity and mortality by malaria in the country by dissemination of the effective malaria control and care system introduced by the project to the entire country. After the project completion, 20 nurses/assistant nurses and microscopists in total, who worked in areas other than the pilot areas, had trainings of the guidelines for malaria diagnosis and treatment revised by the project. In addition, all the clinics utilized "Strengthening Quality of Malaria Service", which compiled findings of the project. Therefore, the project effects have been disseminated in the country at certain level. Also, the project supported community-based malaria prevention activities, including trainings for Health Community Volunteers (HCV). After the project completion, MHMS incorporated "healthy setting" in the National Health Strategic Plan. The Project for Strengthening of Malaria Control System Phase II, which has been in under implementation after this project, has been supporting the pilot activities of "the Healthy Villages", a part of "healthy setting". The HCVs trained by the project have been involved in the HV activities. On the other hand, at the time of ex-post evaluation, data of the reduction of morbidity and mortality of malaria in the entire country could not be verified.

For the malaria control in Solomon Islands, "the Malaria Action Plan (MAP) (2008-2014)" was developed under the supports by WHO, AusAID, GFATM and so forth and the various malaria control actions have been implemented in the light of MAP. In particular, while distribution of mosquito nets and indoor residual sprays (IRSS) funded by the donors including GFATM seems very effective for malaria prevention, the JICA's technical cooperation including this project complementarily contributed to enhancement of public awareness activities for the health staff and communities.

Therefore, effectiveness/impact of the project is fair.

### Achievement of project purpose and overall goal

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<thead>
<tr>
<th>Aim</th>
<th>Indicators</th>
<th>Results</th>
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<tbody>
<tr>
<td>(Project Purpose) Establishment of effective malaria control system in Guadalcanal Province and Honiara City</td>
<td>Reduction of number of malaria cases in Guadalcanal Province and Honiara City (Reduction of morbidity from 2005 before starting the project)</td>
<td>Project Completion: Achieved. Downward trends in Guadalcanal Province and Honiara City from 2005 to 2010. Ex-post Evaluation: Downward trends in Guadalcanal Province and Honiara City from 2010 to 2012.</td>
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<td>Increase in cure rate of malaria in-patients at NRH</td>
<td>Project Completion: 90-93% from 2006 to 2009 despite of improvement in 2008 (95.5%). Ex-post Evaluation: No data available.</td>
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<tr>
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<td>Reduction of number of severe malaria cases in the pilot areas (Reduction of the number of cases in the province from 2005 before starting the project)</td>
<td>Project Completion: Achieved. In Guadalcanal, from 1,742 cases in 2005 to 227 cases in June, 2009. In Honiara, from 67 in 2005 to 40 in June, 2009 (172 in 2006 and 188 in 2007) Ex-post Evaluation: In 2012, 117 in Guadalcanal and 1 in Honiara.</td>
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<td>Improvement of results of patients' satisfaction survey at health facilities (Improvement from 20015 before staring the project)</td>
<td>Project Completion: Mostly achieved. According the satisfaction survey in three regions of Guadalcanal Province (Honiara, Terere and Weather Coast), significant improvement in Honiara, slight changes both in positive and negative in other two regions. Ex-post Evaluation: No data.</td>
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<tr>
<td>(Overall goal) Establishment of</td>
<td>(Revised Indicator) Promotion of human resource development of health staff in</td>
<td>Ex-post Evaluation: Around 20 health staff trained.</td>
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1 "Healthy Setting" is an approach for health promotion using comprehensive and multidisciplinary methodologies, in principles of community participation, partnership, empowerment and equity, based on the WHO Health for All Strategy and the Ottawa Charter for Health Promotion. It aims at maximization of disease control as a whole system. There are specific actions such as "the Healthy Cities Program".
**III. Recommendations & Lessons Learned**

Recommendations for implementing agency:
- It is necessary to conduct regular supervisions for clinics and communities and to continue trainings in order to entrench the activities for malaria control and treatment introduced by the project.

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2 For verification of the overall goal, it was redefined as “The effective malaria disease control system is disseminated in Solomon Island” (In the original PDM, it is “The system is established.”) and revised the verifiable indicators for the redefined overall goal since data for the original indicators were not collected or difficult to collect.

3 The proposal, “Strengthening of Quality of Malaria Service at the Primary Medical Facilities” compiling findings and lessons learned from the project and issues for malaria control in Solomon Island was developed by the project as a manual for malaria control.
Lessons learned for JICA:

- For the project, the overall goal was set out as “The effective malaria disease control system is established in Solomon Islands” and to be verified by the indicators such as reduction of malaria cases and deaths in the country. However, it was difficult to verify casual relation between the project and reduction of malaria cases and deaths in the entire country since the project was implemented only within the limited pilot areas. Base on the logic of the expected project effect, it is necessary to set out the overall goal considering a structure to disseminate the output produced by project (c.f. methodologies to disease control of malaria) in the case of the project aiming at establishment of a model system within specific area.