I. Project Outline

Maritime crimes such as smuggling, illegal entrance, etc. at the Strait of Malacca and the East Malaysia sea areas were hindering the economic activity toward sustainable growth in Malaysia and would help expand breaking out of piracy, armed robberies, terrors, etc. The Marine & Supporting Service of the Royal Malaysian Customs (RMC) was responsible for anti-smuggling, but its equipment was getting insufficient to control the expanding and diversifying smuggling routes laid along the long coast lines.

Objectives of the Project

To enable RMC to expand sea areas under simultaneous 24-hour patrol and to patrol under pitch-black conditions at night against sea smuggling and other illegal activities in the territorial waters of Malaysia, especially at the Strait of Malacca and along the East Malaysia, by procuring patrol boats and onboard equipment for night patrolling.

Outputs of the Project

1. Project Site: Bases under the maritime customs house along the Strait of Malacca (Langkawi, Penang, Lumut, Port Klang, Malacca, Johor Bahru) and the East Malaysia (Bintulu, Miri, Sandakan, and Tawau).
2. Japanese side: Procurement of Speed Boats (10 units) and Hand Held Thermal Imager (14 units) (the quantity is as planned but some details were changed, e.g. type of fire extinguishers, to follow the equipment standard of RMC more strictly).

II. Result of the Evaluation

1 Relevance

This project has been highly consistent with Malaysia’s development policy and development needs at the time of both ex-ante and ex-post evaluation. Regarding development policy, it has been consistent with the 3rd Outline Perspective Plan 2001-2010 and the 9th Malaysia Plan (2006-2010) that aim to establish the economy through “sustainable growth route and recovery and competitive power”, the Three Challenges of RMC (2007) that upheld response to the future movements including threats to the safety on borders, and the Malaysian National Blue Ocean Strategy (NBOS) (2011-) that promotes cooperation among government agencies by conducting joint patrols nationwide to prevention of illegal act at sea. As for development needs, it has been consistent with a need to tackle illegal act at the Strait of Malacca and the East Malaysia sea areas through reinforcement of capacity of RMC. Also, the project was consistent with Japan’s ODA policy to support the area that Malaysia cannot develop on its own as set in the Country Assistance Program (2002) and to introduce Grant Aid for Cooperation on Counter-Terrorism and Security Enhancement (to which this project was classified) at the time of ex-ante evaluation. Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has mostly achieved its objective of enabling RMC to expand sea areas under simultaneous 24-hour patrol and to patrol at night under pitch-black conditions. Before the project, the number of boats had not been enough to carry out 24-hour control covering the whole sea areas even including low speed boats that could not chase an increasing number of high speed illegal boats. After the project, by using the boats procured under this project and the ones purchased with their own funds of the Malaysia side, all bases became equipped with enough number of speed boats (Indicator 1) and came to fully cover their designated patrol areas under 24-hour control (Indicator 2). All speed boats are mostly well used at the time of ex-post evaluation.

With the hand-held thermal imagers procured by this project, the bases became able to patrol at night under pitch-black conditions that had not been possible before the project. RCM became able to tackle illegal act such as smuggling of cigarette and transporting of drugs into Malaysia that are usually held at night. However, the number of working units of hand held thermal imagers gradually decreased from 14 (at 10 bases) in 2011 to 6 (at 4 bases) in 2014. RMC conducted a national seminar to recover full utilization of the imagers in January 2015; therefore, all equipment are expected to be fully utilized in near future (see “4 Sustainability”).

As for the impacts, it is not clear from the available statistics whether the enhanced patrol capacity of RMC by this project has contributed to improvement of maritime security in Malaysia. The increase in total number of smuggling cases (land and sea) recognized by RMC bases slowed down in 2011, possibly due to the control and deterrent effect of RMC using the boats.
and equipment procured by this project according to RMC. And the number of arrest cases and arrest rates decreased (see the graph below)\(^2\).

Therefore, effectiveness/impact of this project is high.

### Quantitative Effects

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Year 2008 (before the project) Actual value</th>
<th>Year 2011 (target year)</th>
<th>Year 2011 (target year) Actual value</th>
<th>Year 2014 (ex-post evaluation year) Actual value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator 1 Number of speed boats ready for patrol at each Base (include speed boats procured with self-funding by Malaysian side)</td>
<td>3 units</td>
<td>4 units</td>
<td>4 units</td>
<td>4 units</td>
</tr>
<tr>
<td></td>
<td>Langkawi, Penang, Lumut, Port Klang, Malacca Johor Bahru (Strait of Malacca) Sandakan, Tawau, Bintulu, Miri (East Malaysia)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicator 2 Number of patrol areas under 24-hour control simultaneously at each Base</td>
<td>1 unit</td>
<td>2 units</td>
<td>2 units</td>
<td>2 units</td>
</tr>
<tr>
<td></td>
<td>Langkawi, Penang, Lumut, Port Klang, Malacca Johor Bahru (Strait of Malacca)</td>
<td>2 out of 3 designated areas (^1)</td>
<td>All of 3 designated areas (^1)</td>
<td>All of 3 designated areas (^1)</td>
</tr>
<tr>
<td></td>
<td>Sandakan, Tawau, Bintulu, Miri (East Malaysia)</td>
<td>1 out of 2 open sea area (^2)(^3)</td>
<td>All of 2 open sea areas (^2)(^3)</td>
<td>All of 2 open sea areas (^2)(^3)</td>
</tr>
<tr>
<td>Indicator 3 Number of speed boats that can patrol with hand held thermal imager (i.e. number of speed boats that are capable of patrol at night, or number of hand held thermal imagers that are ready for use at patrolling)</td>
<td>None.</td>
<td>14 out of 111 units Langkawi:2 Penang:1 Lumut:1 Port Klang:2 Malacca:1 Johor Bahru: 2 Sandakan:1 Tawau:2 Bintulu:1 Miri:1</td>
<td>6 out of 111 units Langkawi:0 Penang:0 Lumut:0 Port Klang:0 Malacca:1 Johor Bahru: 2 Sandakan:0 Tawau:2 Bintulu:0 Miri:1</td>
<td></td>
</tr>
</tbody>
</table>

Source : RMC

Note: In the ex-ante evaluation, the area coverage was considered as follows: (1) At Langkawi, Penang and Lumut, control with the existing speed boats was impossible at the time of rough sea (i.e. about 20% of operation per year is impossible). Therefore, 24-hour simultaneous patrol of 3 areas for (365x0.8) days was considered to fulfill the target. (2) At Sandakan, Tawau, and Bintulu, control in one area with the existing boat was limited to 5 days/week due to daily maintenance/inspection. Therefore, 24-hour simultaneous patrol of 2 areas for 5 days/week was considered to fulfill the target. (3) At Miri, control with the existing boat was possible only in quite calm sea condition (i.e. about 35% or less of operation per year was possible in one area). In the other area, control was limited to 5 days/week due to daily maintenance/inspection. Therefore, 24-hour simultaneous patrol of 2 areas for (365x0.35x5/7) days was considered to fulfill the target.

3 Efficiency

Although the project cost was within the plan (ratio against the plan: 63%) due to the successful tender price that was lower than estimated, project period slightly exceeded the plan (ratio against the plan: 115%) in order to cope with a change the confirmation procedures for consultant contracts on the Malaysia side. The outputs of the project were produced mostly as planned. Therefore, efficiency of this project is fair.

4 Sustainability

The operation and maintenance (O&M) of the equipment procured by the project have been carried out by RMC, the implementing agency. Each base of RMC is in charge of O&M of the speed boats and thermal imagers deployed to it.

The O&M structure is sustained as what it was considered desirable at the time of ex-ante evaluation. The number of staff allocated to each base has been decreased as the government has streamlined its organizations so that efficient and effective security services are delivered at lower costs. Nevertheless, RMC commented that the current number of crew is enough to operate all the speed boat. As for the technical aspect, RMC regularly provides training especially on handling speed boats and equipment onboard to their staff, including on-board training. However, as the result of the survey which conducted in the middle of 2014, at 6 of 10 bases hand-held thermal imagers procured by this project are not fully utilized mainly due to the change of personnel: RMC conducted a national seminar on how to utilize the imagers in January 2015.

In the financial aspect, the budget secured for operation and maintenance of speed boats (e.g. approx. 322 thousand ringgit for the 10 boats in 2013) is much less than planned. However, allocation of maintenance budget is based on actual costs of repair, e.g., if it involves the maintenance of engines and needs more budget than allocated, additional budget would be allocated; therefore, there is no concern in the financial aspect. As for the current status of O&M, most of the procured boats and equipment are in good condition except a software problem of a thermal imager. Maintenance is regularly given by private agencies, and there is no problem with the stock and availability of spare parts.

Therefore, there are some problems in technical aspect and the current status of O&M, and the sustainability of this project effect is fair.

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\(^2\) The increasing number of cases in 2009 due integrated large scale operation that had been implemented that year.
5 Summary of the Evaluation

The project has mostly achieved its objectives of enabling RMC to cover the whole sea areas under simultaneous 24-hour patrol using the speed boats procured and deployed at each base, while utilization of the hand-held thermal imagers procured for night patrol under pitch black conditions has declined. As for sustainability, while the structural aspect and the financial aspect have no serious problem in terms of securement of the organizational structure, number of staff and budget for O&M, some problems have been observed in the technical aspect and the O&M status due to transfer of personnel trained on how to use thermal imagers as well as software problems of one unit of the same equipment. For efficiency, the project cost slightly exceeded the plan.

In light of the above, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations to implementing agency:
For RMC Headquarters: it is advisable to keep monitoring the utilization of equipment and provide necessary support, such as timely repair and conducting technical workshops etc., if it is found the equipment is not fully utilized due to default and/or the change of personnel.

Lessons learned for JICA:
Continuous training on how to handle those procured equipment by the partner country side after project completion should be reminded in the planning stage, so that change in personnel would not affect operation.

Number of smuggling cases (land and sea) recognized and controlled (arrested) by RMC bases