Country Name		Project for Construction of Patrol Vessels for Enhancing the Ability to Secure Maritime Safety and								
Republic of Djibouti		Security								
I. Project Outline										
Background	The Gulf of Aden, off the shore of bordered by Djibouti, is the important waterway in maritime traffic, where approximately 18,000 merchant vessels transit annually. However, pirates had frequently appeared in the waters, which hindered the maritime traffic seriously. For the matter, the Japanese Self-Defense Force, the US forces, and the French forces stationed in Djibouti implement countermeasures against it. Besides, there were other pending issues arising from Ethiopian and/or Somalian refugees who seek asylum in Yemen, illegal fishing, and contraband trade by foreign fishermen in the coastal waters of Djibouti. In order to cope with the above issues, the Government of Djibouti established the Djibouti Coast Guard (DCG) in 2011. However, patrol vessels and Information and Communication Technology (ICT) equipment required for maritime security operations were not sufficiently obtained. Thus, enhancement of the readiness against the threats was an immediate agenda for DCG.									
Objectives of the Project	To enhance the patrol capacity for maritime transport in Djibouti's coastline, by providing patrol vessels for DCG, thereby contributing to the safety and security of the coastline and to ensuring its socio-economic activities in Djibouti.									
Contents of the Project	 Project Site: Djibouti City Japanese side Design and construct two 20m Craft Large patrol vessels Procurement necessary equipment including spare parts Djiboutian side: Rehabilitation of existing wharf, etc. Procurement of fuel, spare parts and overhaul of the vessels 									
Project Period	E/N E G/A E	Date Date	March 30, 2014 April 10, 2014	Completion Date	Nov.14, 2015 (Hand-over)					
Project Cost	E/N Grant Limit / G/A Grant Limit: 924 million yen, Actual Grant Amount: 842 million yen									
Executing Agency	Djibouti Coast Guard (DCG)									
Contracted Agencies	Main Contractor: Sumidagawa Shipyard Co., Ltd. Main Consultant: Shipbuilding Research Centre of Japan									

II. Result of the Evaluation

1 Relevance

<Consistency with the Development Policy of Djibouti at the Time of Ex-Ante >

The project has been consistent with Djibouti's development policies as the Government of Djibouti has addressed the importance of safety and security of the maritime transport since 2010 and notably manifested its national initiative for social development such as in "Djibouti Vision 2035". Also, the Presidential Order was issued for the establishment of the Rapid Intervention Unit within the DCG. It has been eminently illustrative of the effort of enhancing military and civil institutions in order to be able to readily respond to the various threats in the territorial water of Djibouti.

<Consistency with the Development Needs of Djibouti at the Time of Ex-Ante >

The project has been consistent with Djibouti's development needs of the maritime safety and security of the Gulf of Aden. As the tertiary sector of the country covers approximately 80% of GDP and 60% of the labor force, port and harbor services coupled with trade, transshipment, financial services, yields an essential part of wealth and employment.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan's ODA policy towards Djibouti. As a result of the bilateral policy dialogue between Djibouti and Japan, its priority areas for assistance were decided to include strengthening maritime security capacity¹. <Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Effectiveness>

The project achieved its objectives at the time of ex-post evaluation. According to the field survey, the two patrol vessels and ancillary equipment provided by the project have been fully utilized and have performed more than the designed capacity planned at the ex-ante evaluation. From the three aspects in quantitative effect, specifically, cruising capacity (Indicator 1), navigation capacity (Indicator 2) and the maximum number of people rescued from the operation (Indicator 3), cruise capacity both in terms of range and time period exceeded the target values to a large extent; Navigation capacity both in terms of the scale of wind waves and wave height met the target values; Further, the maximum number of people rescued by their operation of the vessels exceeded the target value and increased since the target year of 2018. From perspectives of qualitative effect, the survey result shows that the project has contributed to various aspects of security and safety in the Gulf of Aden. Migratory flows have notably increased in recent years due to regional instability from the civil wars in Somalia and Yemen. As such, the patrol vessels have rescued refugees and migrants from shipwrecks in the responsible area, in addition to the detection of illegal fishing, contraband trades, and terrorist acts.

<Impact>

The project has contributed to creating a deterrence effect to serve safe and smooth maritime transport and socio-economic activities

through joint operations and collaborations with partner countries. The European Union (EU), Japan self-defense force, and other countries have continued to engage in the operation to fight against piracy in the region. The annual numbers of commercial vessels passing the waters of Djibouti were 15,076 in 2017, and 19,863 in 2018, whereas the numbers of the commercial vessels attacked by pirates were 14 in 2017 and 5 in 2018 (3 commercial vessels were attacked in 2019, while a total number of commercial vessels in 2019 was not yet known). In this regard, however, those incidents occurred outside the territorial waters of Djibouti. Regarding the other impacts, there was no resettlement and land acquisition by the project. Beyond that, there was no negative impact observed at the time of ex-post evaluation. <Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

<Quantitative Data>

Indicators		Baseline 2013 Baseline Year	Target 2018 3 year after Completion	Actual 2016 Completion Year	Actual 2017 2 year after Completion	Actual 2018 3 years after Completion	Actual 2019 Ex-post evaluation
Indicator 1. Cruise capability	Range (nm)	Approx. 180	Approx.400	500	580	650	769
	Time period (hour)	Max. 8	Max 22	Max 30	Max 42	Max 51	Max 60
Indicator 2. Navigation capacity	The scale of wind waves	Less than 3	Less than 4	Less than 3	Less than 4	Less than 4	Less than 4
	wave height (m) * ¹	0.5~1.25	1.25~2.5	1.25~1.3	1.3~1.4	1.4~1.5	1.5~2
Indicator 3. Max capacity of rescue operation * ²		20 persons	60 persons	25 persons	40 persons	70 persons	90 persons

Source : Ex-Ante Evaluation Sheet (JP), Preparatory Survey Report (JP), data provided by DCG

Note 1: Actual wave height when the patrol vessel is in operation.

Note 2: Total capacity by the two craft large patrol vessels

3 Efficiency

The outputs were produced as planned, and the project cost and period were within the plan (each ratio against the plan: 91 % and 95%). Therefore, the efficiency of the project is high

4 Sustainability

<Institutional Aspect>

Throughout the implementation of the project to the ex-post evaluation study, the established Chief of Naval Service in DCG remained to be in charge of the operation and maintenance of the project output. Although DCG is currently in the process to rearrange the services and to increase new service areas within the proposed new organizational structure, this structural change will not affect the department relevant to this project. DCG has a total of 740 staff and the Chief of Naval Service has been in charge of the Operation and Maintenance (O&M) in order to conduct maritime surveillance by the two patrol vessels with a total of 40 staff. To operate the vessel, two pilots, six technicians for maintenance were deployed and the rest of the crew are seamen. DCG perceived that needed manpower was sufficiently secured as there were two back-up pilots and three technicians among crew members on a steady basis to provide for contingencies. <Technical Aspect>

Although the technical level of each staff had not been officially evaluated, technicians of DCG were capable of keeping the patrol vessels well-maintained. DCG perceived that it could be attributed to a JICA technical cooperation project entitled "Project for Capacity Development of Djibouti Coast Guard" (Phase I: 2013-2016, Phase II: 2016-2018, Phase III: 2019-2024) of which phase III just commenced. In this regard, the project has provided the Chief of Naval Service a series of training courses such as operation management, and maintenance of the patrol vessels, safety control, search and rescue operations, towing operation, etc. There was a total of 16 staff members who participated in the training in 2017 and 42 in 2018, respectively. <Financial Aspect>

According to the survey result, DCG has secured the budget to cover the expenses for the O&M of the two patrol vessels for four consecutive years since 2016. Despite that the costs of operation in 2019 were 170 million Djiboutian francs (DJF) which almost doubled from that of 2018, DCG was capable of covering them. As for the costs of maintenance, DCG was able to cover 60 million DJF in 2016 and 2017, 125 million DJF in 2018, 131 million DJF in 2019. The trend of disbursement has mostly coincided with an increase in operation records indicated in the table above.

<Current Status of Operation and Maintenance>

At the time of the ex-post evaluation, two patrol vessels and ancillary equipment were fully functional. And DCG has been trained to maintain them to be in good condition for the most part on their own except for a water jet engine system. DCG impartially arranged to have it maintained by a Dubai Based company to ensure the performance. Regarding the procurement and management of necessary consumables and spare parts, however, DCG has found difficulty in setting up an effective system for efficient replenishment. Given the severe limitations of the availability of spare parts in the domestic market, DCG needed to import the proper quantity of them from foreign countries in a timely and cost-effective manner with due consideration of the fact that it requires time to receive them.

Therefore, the sustainability of the project's effect is high.

5 Summary of the Evaluation

The project achieved its objective to enhance safety and security in waters in Djibouti through improving the patrol capacity for maritime transport. As for sustainability, DCG has kept the patrol vessels functional through the O&M activities underpinned by public funding. Considering all of the above points, this project is evaluated to be highly satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Executing Agency:

• DCG (Doraleh Camp)

In order to further enhance the sustainability of the project, the inventory management system should be put in place by enhancement of personnel capacity as well as the expansion of physical space for appropriate storage. Presently, storage does not have enough space for proper management of spare parts. Also, personnel in charge have difficulty replenishing a necessary item on a systematic basis. It is highly desirable that DCG should employ a strategy to reform an inventory system to increase efficiency and reduce unnecessary transaction and storage costs. This method requires administrative staff in charge to have an information processing system to forecast demand of the spare parts and consumables as accurately as possible. It would enable them to place an order based on the supply delivery schedule for the item either in or outside of the country. The strategy would improve the administrative and cost-saving process through evidence-based procurement over time.

Lesson learned for JICA:

As some grant aid project provides machinery or equipment manufactured in Japan, it can be foreseen that the inventory of certain spare parts and consumables becomes an issue after some years of a planned operation. Normally, the Japan side is required to hand over the contact list of manufacturers/agents. However, there would be a challenge raised in the recipient side regarding the inventory management of those necessary spare parts and consumables especially unavailable in the domestic market. Also, without proper monitoring of the supply flow, it becomes critically prone to misappropriation of high-valued spare parts and consumables. As such it is important to plan the inventory management system as a component of the project before completion so that the recipient would be easily visualize how the effective and efficient procurement should be made along with the operation schedule even before actual operation on their own.



DCG Patrol vessel P-05 / P-06 (The photo was taken at the time of the project completion)