STUDY REPORT ON THE PROJECT FOR PROVISION OF FIRE TENDERS IN THE SOLOMON ISLANDS

February 1995



Japan International Cooperation Agency (JICA)

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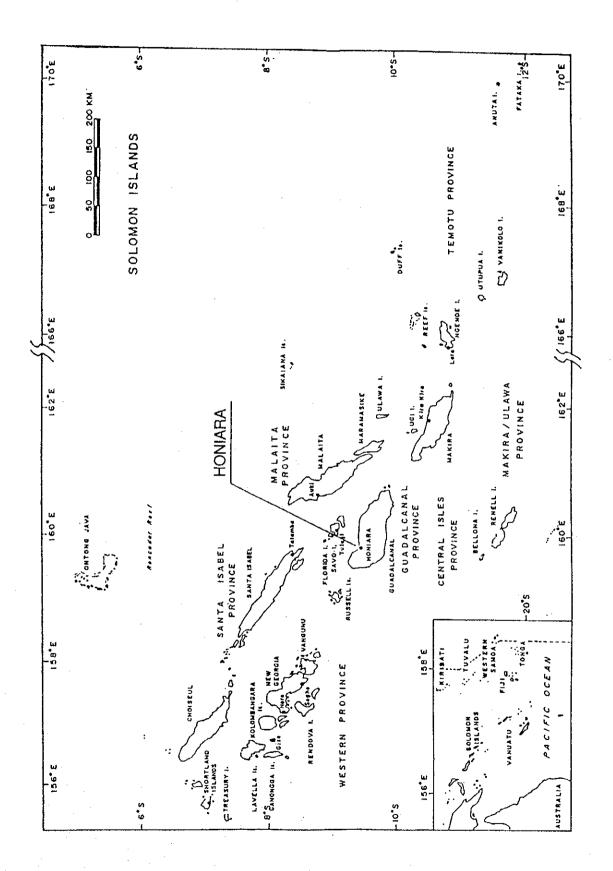


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Chapter 1 Background of the Project

- 1. Background and Contents of the Request
- 1 Background of the Request
 - (1) Country and Natural Conditions

The Solomon Islands comprises six main islands and around 990 smaller islands in the South Pacific Ocean. The national land area is about 28,400 km2, which is relatively large compared to other countries in the South Pacific region, and the total population is 330,000. The Solomon Islands is covered by forests, which provide ample timber resources, reflecting the tropical climate and plentiful rainfall, however, the steep mountainous nature of the land means that only around 12% of the national land area is arable. The 200 nautical miles fishing zone of the Solomon Islands covers an area of some 1.630,000 km2 and provides the country with plentiful fishing resources.

(2) National Economy

Following its independence in 1978, the Solomon Islands has promoted national development in line with national development plans. The economy of the country is dominated by the export of such primary products as copra, timber, marine products and palm oil etc. and is therefore unstable in that it is prone to the effects of fluctuations in the international market prices of such items. Economic growth was particularly sluggish in the latter half of the 1980s due to low international market prices of copra and palm oil and damage caused by cyclones.

Around half of the national budget expenditure in the Solomon Islands is covered by tax revenue and other forms of income, while the rest is subsidized by foreign countries and international organizations. In an effort to carry out economic improvements through the implementation of development plans, the Solomon Islands has been introducing grant aid and loan aid from abroad and is promoting its private sector manufacturing industries through overseas investment and funding.

However, faced with an increasingly large foreign debt, the Government of the Solomon Islands is now in the process of reconstructing the national economy through the twin policies of reducing expenditure and securing higher tax revenue. Moreover, it is aiming to strengthen the economic base and achieve stable economic growth.

(3) Background of the Project

Honiara, the capital of the Solomon Islands, does not currently possess fire fighting vehicles or equipment necessary for handling fires and other forms of disaster, and the development of a fire prevention and fire fighting system suited to the city's recent urbanization has become a matter of urgent attention. In particular, improvements in the level of public welfare and the advancement of the construction of schools, hospitals and research facilities together with the development of commercial districts in the city through the implementation of tourism promotion measures etc. has resulted in an increased and concentrated population in Honiara, and the Government of the Solomon Islands is keenly realizing the necessity for a fire prevention abd fire fighting system in the city.

It is against such a background that the Government of the Solomon Islands requested the provision of grant aid to the Government of Japan.

2 Contents of the Request

The following items of equipment have been requested.

Item of Equipment Quantity
Fire fighting trucks 2
Computers 2

2. Outline of the Sector

A project for district improvement designed to deal with the increasing population is being implemented in Honiara and the

establishment of schools and research bodies together with the development of the industrial and commercial sectors etc. is being advanced. Moreover the Tourism Development Project and airport modernization project include plans to construct hotels, shopping centers and banks and to develop national hospitals etc.

The population of Honiara is presently 60,000, however, this is expected to rise to 70,000 in the near future. As urbanization continues, it is forecast that some 40% of this population is threatened by the possibility of fire. Fire fighting activities in the Solomon Islands are under the jurisdiction of the Fire Service of the Ministry of Home Affairs Royal Police, however, the said department does not possess any fire fighting vehicles or equipment. Therefore, the securing of safety against fires etc. is a major problem in Honiara, which continues to grow as a result of the national development plan measures.

Chapter 2 Contents of the Project

1. Objectives of the Project

The Project aims to provide fire fighting vehicles and related equipment as well as computers for the administration of fire fighting affairs to the capital city of Honiara. The objectives of Project implementation are to secure the safety of the lives and property of citizens and tourists in the event of fire etc. in the city and its surrounding areas, and to advance the safe growth and development of the industrial and commercial districts in the city. Implementation of the Project will also contribute to the development of a national fire prevention and fire fighting system throughout the Solomon Islands.

2. Outline of the Project

① Implementing Agencies and Operational Setup

The implementing and operating agencies for the Project are as follows:

Main supervisory agency: Ministry of Home Affairs,

Operating agency: Royal Solomon Island Police, Fire Service:

RSIP Force.

(2) Maintenance Plan

Regarding the maintenance of the equipment to be provided, the RSIP shall have total responsibility and shall perform daily inspections and repairs. Furthermore, the Government of the Solomon Islands shall bear the responsibility for providing the costs necessary for the maintenance and operation of the equipment. The costs of sending staff abroad for training purposes shall also be met separately by the Government of the Solomon Islands.

3. Design Concept

(1) Examination of Basic Conditions

The equipment to be provided under the Project shall be installed



in the capital city Honiara. The city does not currently possess any fire fighting vehicles or equipment and the fire fighting system etc. in Honiara is extremely poor. The city's airport does possess some old model fire fighting vehicles, which are operated and managed by the fire brigade of the Aviation Division. The method of operation of the fire fighting vehicles to be provided is basically the same regardless of year and model, and it is thought that there should not be any problems regarding the use of the vehicles providing that ample explanations are given at the time of delivery.

Moreover, the computers to be provided for administration purposes are general purpose personal computers, which are widely used throughout the Solomon Islands, and again there should be no problems in terms of operation and maintenance.

2 Examination of Each Item of Equipment

* Fire Fighting Trucks

The request contained the basic specifications and also specific model name etc. Therefore, the design specifications shall be in line with the request contents and based upon general necessary specifications.

The fire fighting trucks shall be stationed in Honiara, where a fire prevention and fire fighting system is urgently required to handle the advancing urbanization and population concentration. It is considered that the provision of fire fighting trucks, which play an important role in initial fire fighting, will prove beneficial to fire fighting activities in the city.

A number of companies make fire trucks in Japan, however, only two were able to match the requested estimate.

* Computers

The request did not indicate any detailed specifications, so general design specifications were selected in consideration of the intended purpose of use.

The computers to be provided are the general purpose type and

are generally used throughout the Solomon Islands, so there should be no problems in terms of operation and maintenance.

- 4. Equipment Specifications
- (1) Fire Fighting Trucks (2)
 - * Vehicle: 160 PS diesel engine, six operators, 11 tons total vehicle weight
 - * Pump: Discharge capacity: Atmospheric pressure Min. 2,000 L/min

 (14.0 kg/cm2)

 High pressure Min. 200 L/min

 (40.0 kg/cm2)
 - * Tanks: Water tank with capacity of around 4,000 L, detergent tank with capacity of around 400 L
 - * Attachments: Water feed and discharge hose, on-board fire fighting tools and standard tools
- (2) Computers (2)
 - * Architecture: Body, HDD, FDD, key board, mouse and printer
 - * Body: Desk top, 32 bit/90 MHz CPU with built-in HDD and FDD
 - * Printer: Laser type
 - * Attachments: Software

Chapter 3 Project Evaluation and Recommendation

1. Project Effects

The direct effect to be gained through the provision of fire fighting vehicles and related equipment is the securing of the safety of the lives and property of the citizens of Honiara, where urbanization is rapidly advancing. Moreover, implementation of the Project will also secure the safety of tourists and aid the promotion of facility development in the area of tourism promotion, which forms one part of the government's policies of economic development. As well as this, strengthening of the fire prevention and fire fighting system in the city and its surrounding areas will also ensure the safety of economic activities and so encourage the flow of investment into the country from abroad and thus hasten the construction of industrial and commercial facilities.

The improved level of safety and the development of the fire fighting system, which will be achieved through implementation of the Project, will be broadcast throughout the Solomon Islands and this will lead to an increased level of awareness by citizens towards fire prevention. At the same time, the citizens will also be made aware of the fact that the equipment has been provided through Japanese grant aid.

2. Recommendation

As was mentioned earlier, urbanization in Honiara has been advancing in recent years and the development of the city's fire prevention and fire fighting system has become an important issue for the country. However, the fire fighting organization in the city is extremely inadequate and, prior to implementation of the Project, Honiara did not even possess its own fire fighting vehicles.

It is important that the Project is implemented after giving consideration to these conditions and selecting equipment contents and specifications that are suited to the needs of the Solomon

Islands side. Moreover, it is felt that ample technical training in the handling, inspection, repair and maintenance of the provided equipment will help make the effects of Project implementation even more worthwhile.



