Strengthening Maritime Transport Sector in Solomon Islands

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Submitted to 91st Transportation Research Board Annual Meeting

Submission date: August 1, 2011 (original); November 15, 2011 (revised)

Word Count = 4,844 (text) + 250* 1 (Table) + 250* 3 (Figure) = 5,844
ABSTRACT

Pacific islands countries heavily rely on marine transport to access essential international economic services and domestic socioeconomic services for their economic growth and improve quality of life due to their geographic dispersion across the Pacific Ocean. A safe and reliable environment is essential to achieve cost-effective shipping services. To ensure that shipping services can be sustained, routes need to be designed to maximize passenger and cargo revenues, so that they are large enough to offset operating and indirect costs.

Currently, the government of Solomon Islands is implementing a project and technical assistance with financial and technical supports from Asian Development Bank and European Union to reform institution, rehabilitate infrastructure, and implement a franchise shipping scheme to achieve equitable distribution of benefits, such as improved access to socioeconomic activities.

This paper will introduce Solomon Islands’ experiences of strengthening maritime transport sector in terms of institution, infrastructure, and shipping service. Also it will address lessons learned from past experience under the ongoing project and technical assistance. The lessons indicating the needs of a holistic approach, focusing on capacity development, responsibility definition, rationale prioritization process, and financial and equipment support, can be incorporated into the design of a future maritime transport project.

Keywords: Maritime transport, Solomon Islands, infrastructure, shipping, institution
INTRODUCTION

Pacific islands countries (PICs) heavily rely on marine transport to access essential international economic services and domestic socioeconomic services for their economic growth and improve quality of life due to their geographic dispersion across the Pacific Ocean. A safe and reliable environment is essential to achieve cost-effective shipping services. To ensure that shipping services can be sustained, routes need to be designed to maximize passenger and cargo revenues, so that they are large enough to offset operating and indirect costs.

In general, issues such as incomplete and outdated regulatory environments, inadequate governance and enforcement, deteriorated infrastructure, and insufficient capacity of the private sector in PICs hamper the development of sustainable maritime transport. These issues need to be addressed holistically to achieve sustainable maritime transport.

This paper will introduce Solomon Islands’ experiences since 2009 when the Asian Development Bank (ADB), European Union (EU), and the government of Solomon Islands provided financial and technical support on domestic maritime in the country. The paper will identify issues related to institutional, infrastructure and private sector constraints and measures to address them in order to establish regular, reliable, safe and efficient shipping services.

BACKGROUND

Solomon Islands is a large Melanesian island country, with a population of 531,000 and a land area of about 28,000 square kilometers, six large islands, dozens of smaller islands, and hundreds of islets and atolls. Over 80% of the population lives in rural villages of a few hundred persons. Rapid population growth (3.1% per annum) has outpaced sluggish economic growth (2.5% per annum) over the past two decades. The economy is based on primary commodities from agriculture, forestry, and fishing, although it has been among the most adversely affected in the Pacific by the global economic crisis. Gross domestic product growth averaged 7.3% per annum in the five years to 2008 but contracted by 1.2% in 2009. However, Solomon Islands has returned to positive growth of around 7.2% in 2010, on the back of a rebound in log exports and strong growth in palm oil, cocoa, and fisheries (1).

The country is fragile, weakly performing, and emerging from several years of conflict from 1999 to 2003. The country is also vulnerable to natural hazards, such as floods, cyclones, and earthquakes. A tsunami triggered by an undersea earthquake in 2007 resulted in damage to a large number of houses, infrastructure, schools, and medical facilities, affecting 20,000 people of total population of 90,000 in the disaster area.

Maritime transport is vital to the country's transport sector as it provides access between the six main islands and smaller island groups, and a means of transportation in rural areas where road coverage is poor. Passengers use maritime transport for social, educational, health, and commercial purposes. Goods are freighted between the outer islands and Honiara, a capital city, for both interprovincial trade and export. Imports include consumer goods, building materials, and fuel.

The maritime infrastructure inventory consists of international ports at Honiara and Noro, and Yandina (although Yandina no longer operates); approximately 86 small wharves and jetties, and 26 anchorages. There are about 60 buying points throughout the islands, each with a storage shed and a radio for the communication of ship schedules. Such communication in the maritime sector is essential to allow exporters adequate time to prepare their cargo.

Geographically, the larger islands are within 400 nautical miles (741 km) of Honiara. Routes can be categorized as outer interisland routes that are heavily exposed to wind and wave action and inner interisland routes that are more protected. A typical voyage will involve long distances from the main centers and export gateways (such as international ports) to remote islands and the weather coasts and vice versa. As the remote areas have smaller populations, regular shipping services to those locations are commonly economically unviable.
ISSUES

The following will discuss issues in the maritime transport sector in Solomon Islands in terms of institution, infrastructure, and maritime transport network and service.

Institution

Planning, financing, and maintenance in the maritime sector have been inadequate, with most facilities in poor condition and needing rehabilitation. Weak institutional capacity in the Marine Division of the Ministry of Infrastructure Development (MID) to administer marine transport infrastructure has resulted in poor sector governance, ineffective safety regulation, poor compliance with international obligations, weak environmental management, inadequate hydrographic charts and aides to navigation, and limited search and rescue capacity.

The Marine Division also encountered issues in providing effective enforcement of maritime transport safety. Training for shipping operators and the Marine Division staff was required to improve safety awareness. In addition, the introduction of autonomous administration that was not vulnerable to cultural and political influence was vital.

The revenue in the form of fees on vessels previously collected fell short of the cost of delivering maritime safety services. Typical annual revenue was about $32,500, while annual costs were about $120,000 to $200,000. As the level of safety services delivered was inadequate, it was reasonable to expect that the costs incurred by a properly functioning maritime safety authority would be considerably higher. Due to the funding situation, problems recurred with services, expertise, and systems, resulting in ineffective management of maritime safety.

Infrastructure

Most wharves and jetties are in poor condition as they are old and not maintained periodically. The current maintenance approach is reactive, with MID responding when a complaint is made at the provincial government level. Maintenance costs under this approach are high. In addition, expected economic benefits generated by wharves and jetties have not been sufficient to cover the true cost of capital, and accumulated losses stand at about $1.5 million because of inadequate funding for operation and maintenance. Due to deferred maintenance caused by lack of MID resources, such as funds and personnel, deteriorated wharves and jetties hinder service provision and pose a safety risk and reduction of accessibility and productivity of users. MID requires appropriate operation of the assets and records of asset use and condition over time in order to justify their maintenance and rehabilitation and to sustain their asset operation.

Sustainable maritime transport requires increased investments and improved maintenance. Under several marine infrastructure projects executed by ADB and EU, 19 wharves and jetties were constructed or rehabilitated. Another 23 wharves and jetties were proposed for reconstruction in accordance with the National Transport Plan (NTP), which identifies investment priority.

Also, global climate change is expected to cause sea level rise and increase vulnerability to natural hazards. From 1994 to 2008, Solomon Islands has experienced an increase in sea level of 7.6 millimeter per year. The numbers of category 4 and 5 storms in the Pacific region have more than doubled when comparing their frequency and occurrence between 1975-1989 and 1990-2004 (2). In addition, the country belonging to the Pacific Ring of Fire is exposed to a risk of infrastructure damages caused by earthquake and tsunamis as the case in 2007 above shows. Hence, robust infrastructure, taking into account the climate change impacts and natural disasters, are required to take over the current deteriorated infrastructure with obsolete design standard.
Maritime transport network and service

Distance and low demand for passenger and cargo are constraints for commercially viable shipping services to some remote destinations. Remote communities lack reliable maritime services and are among the poorest areas of Solomon Islands.

Voyages to outer islands involve greater distances in less-protected waters requiring larger vessels with higher operating costs, thus leading to lower service frequencies. Services are often delayed for weeks or months, and sometimes cancelled, leaving passengers and cargo stranded. The services are often forced by financial necessity to migrate to routes where there is sufficient volume to provide or contribute to commercial viability. This may cause low trade volumes in the remote areas and trade imbalance between high-volume areas and the remote areas.

Most routes are operated by small companies with limited management expertise and capacity. Many vessels are old, requiring maintenance and high operating expenditures. Limited financial capital of ship owners constrains the adequate maintenance of their ships. Meanwhile, some provincial governments apply restrictive licenses and fees to operators from other provinces to protect services provided by their own provincial development authorities. Private sector operators consequently do not face a level playing field in providing services to all destinations. To provide socially desired services on these routes, the Marine Division of MID frequently chartered vessels or subsidized operation on routes assumed to be commercially unviable.

Deficiencies in training and ship inspections for maritime safety compared with international standards were identified. Deteriorated and unsafe ships commonly provide services due to poor enforcement of regulations. According to the Shipping and Transport College (3), four ships were lost with 18 casualties from 1999 to 2002. Effective management of maritime safety is difficult due to insufficient and unpredictable funding caused by dependence on the annual government budget; conflicts between the need to keep vessels in service to operate vital shipping supply lines and the need to ensure the safety of crew, passengers, and the environment; a limited pool of appropriate expertise; and inadequate systems vulnerable to cultural and political influences. Most shipping operators do not prioritize safety measures due to a lack of safety awareness.

THE PROJECT

To address these issues, the government of Solomon Islands commenced implementing in 2009 the Domestic Maritime Support (Sector) Project over ten years with grants from ADB and EU of $14.00 million and $5.25 million equivalent, respectively. EU funds were reduced to $1.73 million after 31 December 2010 due to its unavailability. The government has provided $2.15 million counterpart contribution.

In addition to the project, an associated technical assistance (TA) was provided to assist MID in the establishment of Solomon Islands Maritime Safety Administration. The implementation period is from July 2009 to December 2011. The total cost of the TA is $1.9 million, comprising ADB’s TA fund grant of $1.0 million, EU cofinancing of $0.6 million equivalent, and a government counterpart contribution of $0.3 million equivalent. The project and TA comprise three components as follows.

Institutional reform

The TA reformed the Marine Division into the new Solomon Islands Maritime Safety Administration (SIMSA). The improvement of maritime administration (vessel registry, inspection, survey, and licensing of seafarers) and marine safety (search and rescue, navigation aids, and environmental protection) have been brought together under SIMSA. Mandatory safety equipment was purchased to upgrade the compliance of SIMSA and private sector vessels to meet national and international standards. It is expected that SIMSA will become a professional and efficient agency able to effectively discharge its
planning, asset management, safety, and regulatory functions, as well as facilitate private sector participation by ensuring adequate sector governance and regulation.

The TA rationalized the tasks belonging to MID and SIMSA as part of the institutional reform as:
- infrastructure management including maintenance and rehabilitation;
- shipping service provision utilizing chartering;
- safety including search and rescue, navigation aids, and environmental protection; and
- regulation including registration, survey, and licensing.

Figure 1 illustrates the previous structure of the MID’s Marine Division responsible for all tasks with limited capacity. The level of service in areas such as maritime safety enforcement, aids to navigation, and flag state inspection and survey had been acceptable. Search and rescue had operated effectively, but without adequate systems and support. Responsibility for maritime charts had been with the Department of Lands and Survey within the Ministry of Agriculture and Lands, which was not appropriate for such a specialized function. In each of these areas, there were international standards and protocols that should have been met or complied with, and responsibility for compliance in specific areas was not clearly defined.

The reform addressed the central issue of establishing clear responsibility for compliance with national and international protocols and obligations, and provides a more logical structure for divisional responsibilities. The new structure in Figure 2 clearly identifies the entity as a regulatory administration. A new advisory function, including a project steering committee comprising high relative governmental entities and an advisor to the director of marine, was attached to SIMSA’s structure. The Maritime Safety Administration Act 2009 to carry out the changes to the structure gave legislative support to the changes and a clear perception of the nature of the reform to industry and the community. It also assisted in aligning SIMSA with similar entities elsewhere in the region, and allowed the replacement of some archaic legislation relating to titles, fees, etc. Importantly, the new status of the entity as an administration, while still within the purview of MID, limits the potential for political interference through its clearly defined regulatory role.
After the institutional reform was accomplished, the tasks were divided between MID and SIMSA. MID is in charge of the infrastructure management and the service provision through a Franchise Shipping Scheme (FSS); SIMSA provides operational and regulatory oversight of safety. In future, SIMSA will be involved in operation with respect to monitoring of the infrastructure and service provision, as it can obtain reports regarding infrastructure condition and shipping services from operators. This separation strengthens the capacities of marine transport authorities through clearer definition of responsibilities. In addition, SIMSA is free from the task of chartering shipping for commercial purposes.

A new organization plan developed by the TA was adopted by MID. Role definitions in relation to new and expanded responsibilities of SIMSA (i.e., forty three new position description documents) were drafted. A staff resource plan was also developed to form a road map for actual transition. Given a formal approval on the road map by the government, SIMSA was formally established on July 1, 2010.

The TA developed a training plan to bring Solomon Islands into line with its obligations under the International Maritime Organization’s Seafarer Training Certification and Watchkeeping Code. Also, an internal and external workshops and a mix of on-the-job training and mentoring were developed.

**Infrastructure improvement**

The project improves nine wharves and jetties by either rehabilitation or reconstruction. Civil works will be undertaken in remote areas of provinces that experience an incidence of poverty in accordance with the government’s Medium Term Development Strategy 2008-2010 (4). Recurrent funding for maintenance through community contracts, supported by a labor-based maintenance approach, will be provided to improve life of infrastructure.

To conduct rehabilitation or reconstruction works, a project management unit (PMU), directed by the permanent secretary of MID, was established in MID. Given MID’s limited technical staff resource, a consulting firm has been retained for day-to-day implementation services, including subproject baseline surveys, feasibility documentation, design, and supervision; tender process management; contract management; preparation of withdraw applications; preparation of project progress reports and a project completion report; project accounts maintenance and completion of grant financial records for auditing; socioeconomic impact monitoring; and related project management activities. PMU is conducting similar activities above for FSS explained below.

There are a number of candidates for infrastructure improvement according to government’s NTP.
To prioritize the candidates, PMU and MID established a multi-criteria prioritization approach, considering population of service catchment area, engineering cost estimates, economic internal rate of return (EIRR), navigability depth and shelter, priority under NTP, and then chose nine wharves based on total score ranking.

To design infrastructure and develop an implementation plan, PMU assesses environmental impacts and social impacts, such as resettlement and indigenous peoples in accordance with ADB’s safeguards policy. The assessment results will be used for identifying economic impacts on cargo handling time, ships time, passenger time, agricultural products’ productivity, and so on. The detailed design considers a minimum effective design life of 50 years, with aggressive salt-water environment and expected wave actions.

**Franchise shipping scheme**

The project designs and implements FSS to award franchises for provision of shipping services to remote areas that are considered commercially unviable. Seven routes were identified as unviable at project appraisal (see Figure 3). Remote communities in the project areas lack reliable maritime services and are among the poorest areas of Solomon Islands. The project areas have a higher incidence of poverty, lower agricultural productivity, and greater constraints in access to transport services than the national averages. Total demand for transport services in Ontong Java, Renbel, Sikaiana, and Temotu represents 2.1% of passenger trips and 8.0% of cargo shipments out of the total national demand. Except for Renbel, these outer islands are more than 400 nautical miles (741 km) from the economic center through relatively unprotected waters, and hence require larger vessels with higher operating costs, which lead to lower service frequencies.

**FIGURE 3 Franchise shipping routes.**
It is expected that transport services on these routes will increase through subsidies to private sector operators based on a minimum-subsidy tender process. Initial contracts are for two years, with longer periods for subsequent terms possible. Subsidies are tied to performance, including vessel suitability (dimensions, capacity, and safety certification), franchise areas and routes, call locations and frequency, substantiation of calls and submission of voyage data, and flexibility for force majeure. During the initial contract period, regular views will be carried out by PMU to ensure that actual revenue and costs are aligned with prior estimates so that the contract provisions will allow routes to become commercially viable.

The amounts of payable subsidies will be determined from the difference between total forecast revenue per voyage and total costs recovery per voyage presented in a financial proposal from a bidder (or shipping owners and operators). The compositions of revenue and costs are described in Table 1. The actual payment for each completed voyage will be adjusted based on increase in total actual revenue, rise or fall in the applicable fuel price index, and agreed annual cost increase based on consumer price index. The revenue adjustment includes an incentive for shipping operators, allowing obtaining revenue increment between actual revenue and forecast revenue in quarterly basis without adjustment until the increment is less than or equal to one-third of forecast revenue. If operators can get increment more than one-third of the forecast revenue, subsidy reduction based on an agreed rate will be applied to the following quarter.

**TABLE 1 Compositions of Revenue and Costs**

<table>
<thead>
<tr>
<th>Items</th>
<th>Number/quantity</th>
<th>Rate ($</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passengers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outbound</td>
<td>Adults</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Inbound</td>
<td>Adults</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Students</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Children</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Freight</td>
<td>Outbound</td>
<td>Cargo (tons)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Cargo (cubic meters)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Inbound</td>
<td>Cargo (tons)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Cargo (cubic meters)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuels</td>
<td>Diesel</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Lube Oils</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Pre-Mix</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Other Direct Costs</td>
<td>Crew Salaries and Wages</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Provisions/Ration costs</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Port Dues</td>
<td>✓</td>
<td></td>
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<tr>
<td></td>
<td>Loading/Unloading Costs</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Contribution to Other Costs</td>
<td>Charter/Lease Costs/Loan Repayment</td>
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<td></td>
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<tr>
<td></td>
<td>Vessel Replacement or Depreciation</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Routine Repairs and Maintenance</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dry Docking</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marine Insurance</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establishment including Finance and Administration</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Margin of 5% of costs</td>
<td>✓</td>
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</tr>
</tbody>
</table>

Primary call locations and frequency are predetermined by MID, so a bidder needs to estimate revenue generating from passengers and cargo at call locations while considering required costs for voyage such as fuels, crew salaries, port dues, charter costs, etc. As long as call locations and frequency are complied with those requirements, a bidder can develop an innovative shipping service plan to
increase revenue, such as adding secondary call locations where there are huge demands and using a fuel efficient vessel.

In addition to the call locations and frequency, a bidder must comply with all registration, certification, insurance and safety requirements applying under the laws of Solomon Islands.

A preliminary financial analysis indicates that each of the seven routes is expected to reach a break-even point five to ten years after commencement because of additional passengers and cargo induced by safe and reliable shipping services.

LESSONS

The following will discuss lessons learned from experiences of implementing project and TA since 2009.

Institutional reform

It is important to keep the momentum of the institutional reform. In most areas, the reform has progressed and the organization is on course to continue its development. To sustain the reform, the TA was extended by 5 months up to the end of 2011. Also, a new TA and project will continually support capacity development in MID and SIMSA over the next five years. It is expected that MID will further increase its responsibility and capacity in project implementation, administration, and infrastructure asset management, while SIMSA will sustain the momentum of the institutional reform and capacity development.

The clear articulation of responsibility is a must. The ownership of navigation aids will be within MID. Although SIMSA will bear responsibility for monitoring and reporting of navigation lights, repairs and maintenance costs for the navigation aids and any liability for landowner compensation will remain as MID’s responsibility. Sustaining navigation aids is important for the continuity of a safe maritime transport environment.

Adequate finance is key to ensure the sustainability of strengthened maritime transport sector. After the Maritime Safety Administration Act 2009 was enacted, SIMSA successfully introduced levies on overseas vessels to support the upkeep of navigation aids and for the functions performed and the services provided to the private sector for vessel registration since November 2010. SIMSA has charged $670,000 value of levies to the marine industry compared to about $13,400 that would have been collected under an old system (i.e., fifty-time increase).

Infrastructure improvement

The objective of the project is to provide safe maritime transport services to rural areas where there are no significant economic activities. Hence, it is imperative to adopt decision making process which is not solely controlled by economic or efficiency objective.

MID conducted feasibility studies of 20 rural wharf subprojects to select candidates for rehabilitation as the outputs of the project. The result showed that only four wharves could achieve an EIRR of at least 12%, which indicates economic viability. The reasons for this are as follows:

- Construction costs have increased since 2008 when the project was designed. Inflation rates in Solomon Islands in 2008 and 2009 were 17% and 13%, respectively. Steel price rose by 50% alone in 2008 and cement by 30%. Labor rates throughout Melanesia have been constantly rising by over 10% per annum.
- The results of bathymetric survey concluded that berthing requires a minimum water depth of 5 meters at low tide to provide access for inter-island vessels.
- The parameters of agricultural production used in economic analysis were refined, giving lower economic outputs than what was envisaged at project design.
However, it was determined that such strict enforcement of EIRR requirements would hinder the project objective. To address this, the government adopted a multi-criteria approach to prioritize candidate subprojects assessing the zone of influence and their priority under the NTP to capturing social benefits that cannot be quantified through conventional economic analysis. In addition, as Solomon Islands is a post-conflict and weakly performing country, flexibility is allowed to implementation arrangements including procurement, disbursement, project appraisal requirements, and project processing (5). This flexibility allowed the EIRR requirement to be reduced to 8%, thereby allowing unquantifiable social benefits to be realized.

Franchise shipping scheme

The structuring of shipping routes requires careful study, and should take into consideration opportunities for operators to generate sufficient revenue. This may entail including berthing points at more economic ports of call. The initial routes under the project made their voyages exclusively to the uneconomic rural areas, so that it was extremely difficult to generate sufficient revenue to be profitable, even with a subsidy. This was compounded by some operators chartering vessels, and being charged exorbitant chartering fees.

Due to limited capacity of operators to operate competitively within the private sector, it was important to simplify the bid documents and conduct comprehensive pre-bid meetings to ensure the scope of shipping services was fully understood. In addition, while the procurement of services was through national competitive bidding procedures, a longer bid period of eight weeks was provided to allow the operators sufficient time to prepare bids that would be evaluated responsive.

Ship owners and operators in the Solomon Islands experience difficulties in providing shipping services due to financial constraints and lack of safety equipment. These factors will prevent them from participating in bidding process, meeting safety standards, and getting an insurance cover for the safety of the vessels, passengers and cargo. To address this, prequalification requirements were lowered to attract many owners and operators to FSS, safety equipment was procured by MID and leased to the operators them. Workshops were held for insurance brokers, to increase their awareness of the reform of maritime safety in the Solomon Islands, so that they could provide insurance cover to the operators.

The voyages completed to Temotu Outer Islands had encouraging results. Direct income of the third voyage was about twice the amount from the first two voyages, due to high volumes of inbound freight from the rural communities, predominantly copra, livestock and timber. Also, government officers from Ministries of Health and Education are travelling on this franchise route to reach remote areas, instead of chartering expensive vessels. The high volumes of inbound freight indicate the growing confidence among people in the Temotu Outer Islands of the regular and reliable shipping services. The people in the rural communities expect to obtain huge profits because of increase of agricultural production induced by the FSS and the increased accessibility to socioeconomic opportunities using the FSS.

In the early stage of the 10-year FSS implementation under the project, it is expected that MID will establish appropriate approaches to shipping route selection, cost estimates, procurement procedures, FSS administration, and monitoring and evaluation, while shipping operators will improve their capacity in bidding, shipping operation, financial management, and compliance with safety regulation.

Development approach

It is imperative to holistically respond to a number of issues while taking into account the sequence of upcoming activities. First, the environment for the implementation of infrastructure improvement and FSS was established. Activities included procurement of project funds, amendment to regulation and legislation, establishment of SIMSA, improvement of MID and SIMSA staff capacity by training provided by international consultants, preparation of detailed design and safeguards plan of infrastructure improvement and FSS with support from international and national consultants, and procurement of
When establishing the implementation environment, MID disseminated project information to ship owners and operators, communities, insurance brokers, and other stakeholders, through workshops, public consultations, and media to enhance their understanding in the project.

Then, actual project implementation started. MID has strengthened its business administration capacity, such as project management, financial management, procurement, monitoring and evaluation, and training, through on-the-job training with support from the consultants. SIMSA has improved its financial and regulatory functions to realize safe shipping environment. Furthermore, private sector, including contractors for infrastructure improvement and shipping operator, has improved its capacity in financial management, procurement, and project management through engaging in associated activities.

Currently, MID and SIMSA rely on external resources such as personnel and funds for the project implementation. To reduce the dependency, it is necessary for the government of Solomon Islands to develop a strategy how to rely less on external resources and increase country’s ownership.

CONCLUSION

This paper reviewed Solomon Islands' experiences of strengthening maritime transport sector in terms of institution, infrastructure, and shipping service. Also it addressed lessons learned from past experience under the TA and project. The lessons indicating the needs of a holistic approach, including capacity development, responsibility definition, rationale prioritization process, and financial and equipment support, can be incorporated into the design of a future maritime transport project in other PICs. Although each country has unique environment, it is worth reviewing exiting status and needs in maritime sector and develop an investment strategy based on the experiences in Solomon Islands.

Since TA and project have just begun in 2009, ADB will continue supporting MID and SIMSA to achieve the project objective by periodically reviewing their progress, identifying issues, and addressing them. It is expected that a next report will be able to describe socioeconomic impacts to be generated by the infrastructure improvement and FSS.

ACKNOWLEDGEMENTS

The authors thank to the Ministry of Infrastructure Development of Solomon Islands, SMEC International Pty Ltd, and GHD Pty Ltd for providing data to develop this paper. The views and conclusions expressed are those of the authors, who are responsible for the facts and accuracy of the data presented, and do not necessarily represent the official views of Asian Development Bank.
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