

I. Container Transshipment Fees

Lassul Station's strategic location in East New Britain positions it as a potential transshipment hub for regional trade in the Pacific, connecting major shipping routes between Asia, Australia, and the Americas.

a) Revenue Potential:

- Volume: Assume 500,000 metric tons of transshipment cargo annually, scaling to 1 million metric tons in later phases.
- Average Fee: \$50/metric ton for handling, storage, and short-haul logistics.

b) Annual Revenue Calculation:

Revenue from Transshipment = Volume (metric tons) × Fee (USD/metric ton)

- 500,000 metric tons × 50 = \$25 million/year
- Later Phases: 1,000,000 metric tons × 50 = \$50 million/year

c) Supporting Infrastructure:

- Additional berthing space and cranes to support increased cargo movement.
- Advanced container tracking systems integrated with the Port Community System (PCS).

II. Ancillary Services

Modern seaports generate a significant portion of revenue from value-added and auxiliary services that cater to shipping lines, freight forwarders, and traders.

Potential Services:

i) Cold Storage Facilities

- **Capacity:** 10,000 metric tons
- **Storage Fee:** basing on factors such as storage duration, product type (e.g., frozen, chilled), and refrigeration requirements. For example:
 - Short-term storage (1-7 days): \$5 - \$10/metric ton/day
 - Medium-term storage (8-30 days): \$3 - \$8/metric ton/day
 - Long-term storage (over 30 days): \$1 - \$5/metric ton/day

ii) Warehousing and Storage

- **Capacity:** 50,000 square meters
- **Average Fee:** basing on factors such as storage type (e.g., open storage, covered storage, refrigerated storage), storage duration, and the size and type of goods stored.
 - Example: \$3 - \$15/sqm/month

iii) Maintenance and Repair

- **Target Clients:** 500 vessels annually
- **Fee:** a realistic range based on the type of services offered (e.g., minor repairs, vessel cleaning, anti-fouling).
 - Example: \$1,000 - \$5,000/vessel

iv) Customs and Inspection Fees

- **Cargo Volume:** 2 million metric tons annually
- **Fee:** \$2.50/metric ton as a reasonable starting point, to be reviewed and adjusted based on prevailing customs and inspection fees at other regional ports.

III. Bilateral Trade Agreements

Establishing trade agreements with key countries can secure consistent cargo flows, preferential tariffs, and long-term partnerships, enhancing the port's revenue base.

Potential Agreements:

- **Fisheries Export Agreements:**
 - Secure export quotas with China, Japan, and the EU for high-value seafood.
- **Trade Facilitation Partnerships:**
 - Agreements with Pacific nations for transshipment services and regional trade facilitation.



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CASE STUDY

Lassul International Seaport and Industrial Park

Project Overview

- **Components:** International Seaport, Processing facility for fisheries and marine resources
 - Land acquisition, Project Management, Site Survey, Environment Impact Assessment, Local Consultants Engagements, Negotiations with Tribal Leaders & Stakeholders, Scoping Studies, Airport Upgrades Identifications, Seaport Upgrades Identifications, Local Engagements, Mapping Sustainable Food Program for PNG Fishery and Marine Resources, Security Personnel, Detailed Engineering Designs, Legal Advisory
 - Jetty, Cranes and Conveyor
 - Processing Facility Building, Cold Storage, Canning
 - Accommodation
 - Dredging
 - Solar Farm, Electrical Grid
 - Sewage Treatment Plant & River Water Treatment Plant
 - Container Park
 - Logistic upgrade
 - Port Amenities
 - Sewage Treatment Plant & River Water Treatment Plant upgrade
 - Road Upgrades
 - In-Port trans-shipment facility
- **Objective:** To modernise Papua New Guinea fisheries and marine resources and integrating support infrastructures

Financial Projections for Stage 1 and Stage 2

(100% Project Financing)

1. Combined Capital Expenditure (CapEx)

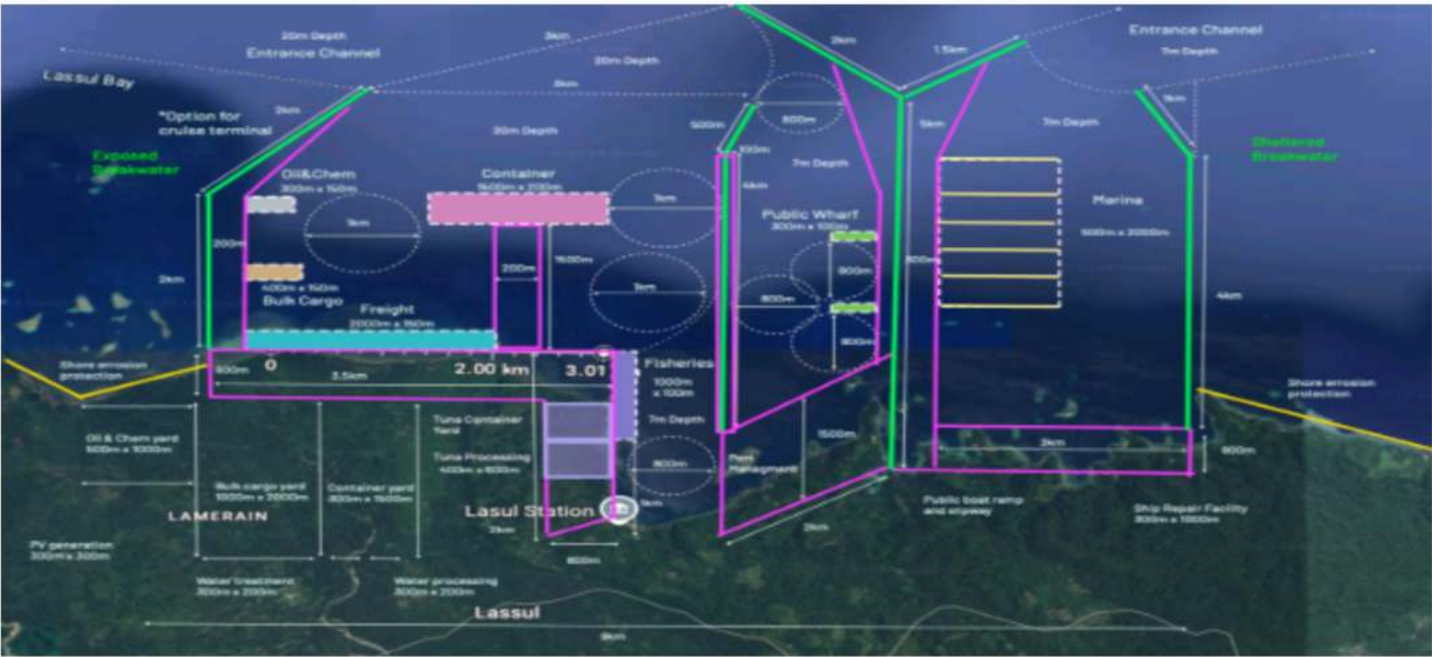
Stage	Project	Budget (USD)
Stage 1	Land acquisition, project management, site surveys, environmental assessments, and stakeholder engagements	\$300 million
	Jetty construction	\$150 million
	Cranes and conveyor systems	\$100 million
	Processing facility building	\$250 million
	Cold storage facility	\$20 million
	Canning facility	\$100 million
	Accommodation facilities	\$100 million
	Dredging, solar farm, electrical grid, sewage treatment plant	Costs to be confirmed (TBC)
Stage 2	Container Park development	\$50 million
	Logistics upgrades	\$100 million
	Port amenities	\$100 million
	Water desalination plant, road upgrades, in-port transshipment facility, solar farm for seaport, electrical grid	Costs TBC
Total		\$1.27 billion ±

2. Estimated Debt Financing Details

Parameter	Details	Value
Loan Amount	100% of CapEx	\$1.27 billion
Interest Rate	Annual interest rate	3.0%
Loan Tenure	Repayment period	15 years
Annual Debt Servicing (Principal + Interest)	Based on equal annual installments	\$106.0 million/year

3. Estimated Annual Operating Costs

Category	Estimated Cost (USD/year)
Seaport operations (jetty, cranes, container park, and logistics)	\$40-50 million
Processing facility operations (canning, cold storage, desalination)	\$30-40 million
Maintenance and repairs (dredging, solar, electrical grids)	\$15-20 million
Administration and workforce costs	\$20-25 million
Total Operating Costs	\$105-135 million/year



4. Projected Annual Revenue

Revenue Source	Details	Estimated Revenue (USD)
Seaport operations	430 ships 1,000,000 mt bulk cargo 1,000,000 mt containerized cargo (50,000 TEU) 2,527 TEU tuna whole (50,544 mt) 500 TEU tuna canned (9,984 mt) 94 TEU tuna dried (1,872 mt)	\$116,924,490.00
Processing facility (fisheries and marine resources processing)	Average 100,000 metric tons/year × \$2,000/metric ton	\$200,000,000.00
Sales from Tuna (whole, canned, dried) [excluding other commodities]	50,544 mt tuna whole 9,984 mt tuna canned 1,872 mt tuna dried	\$554,910,720
Total Revenue		\$871,835,210 / year

1. The Seaport’s projected annual revenue for fees, and charges is calculated as follows:

Item	Fees / Charges (USD)
430 ships	2,150,000
1,000,000 mt bulk cargo	25,000,000
1,000,000 mt containerised cargo (50,000 TEU)	84,500,000
2527 TEU tuna whole (50,544 MT)	4,270,630
500 TEU tuna canned (9,984 MT)	845,000
94 TEU tuna dried (1,872 MT)	158,860

2. The annual revenue for the Processing Facility is determined as follows:

Annual Revenue = Processing Capacity × Average Revenue per Metric Ton

Annual Revenue = 100,000 metric tons/year × 2,000 USD/metric ton = 200,000,000 USD/year

Expanded Revenue Streams
In addition to the primary revenue streams from seaport operations and the fisheries processing facility, exploring diversified revenue opportunities can significantly enhance the project's financial viability. These streams include container transshipment fees, ancillary services, and leveraging bilateral trade agreements.