IMPROVING THE AVAILABILITY OF MARITIME TRANSPORT COST DATA IN THE PACIFIC REGION

Nauru Summary Report

Pacific Maritime Technology Cooperation Centre (MTCC Pacific)

Acronyms

ASYCUDA	Automated System for Customs Data
EEZ	Exclusive Economic Zone
HS	Harmonised System
IMO	International Maritime Organization
IMTS	International Merchandise Trade Statistics
GCF	Green Climate Fund
GDP	Gross Domestic Product
GHG	Greenhouse Gases
LDCs	Least Developed Countries
MEPC	Marine Environment Protection Committee
MTCC Pacific	Pacific Maritime Technology Cooperation Centre
NBS	Nauru Bureau of Statistics
NCS	Nauru Customs Services
NMPA	Nauru Maritime and Port Authority
NPDL	Neptune Pacific Direct Line
NSDS	Nauru Sustainable Development Strategy 2019-2030
NSL	Nauru Shipping Line Limited
PACER	Pacific Agreement on Closer Economic Relations
RONPHOS	Republic of Nauru Phosphate Corporation
SIDS	Small Island Developing States
SDD	Statistics for Development Division
SPC	The Pacific Community
SPREP	Secretariat of the Pacific Regional Environmental Program
TC	Technical Co-Operation Committee
UNCTAD	United Nations Conference on Trade and Development

List of Figures

List of Tables

Contents

BACKGROUND

In an ever interdependent and globalized world, countries share not only in growth and prosperity but also in crises and challenges. One such challenge is climate change, and its implications for economies and societies developed and developing alike. Like other economic sectors, maritime transport is at the forefront of the climate change challenge.

With climate change being a global challenge and maritime transport an inherently international industry, the International Maritime Organization (IMO) has led efforts to set clear goals, milestones, and regulations with a view to reducing Greenhouse-Gas (GHG) emissions in shipping.

The *2023 IMO GHG Strategy on reduction of GHG emissions from ships* acknowledges that impacts on countries of candidate GHG reduction measures should be assessed and considered as appropriate before their adoption, paying particular attention to the needs of developing countries, especially Small Island Developing States (SIDS) and Least Developed Countries (LDCs).

The Comprehensive Impact Assessment of the IMO short-term GHG reduction measure (MEPC 76/7/13), adopted at the 76th session of the IMO's Marine Environment Protection Committee (MEPC 76) identified several data gaps on maritime transport costs and the economics of shipping, especially in the Pacific region. To this, the IMO has initiated a project on improving the availability of maritime transport costs data in the Pacific region, funded through the IMO's GHG TC Trust Fund.

In line with discussions in both the IMO's MEPC and the Technical Co-Operation Committee (TC), the Pacific Maritime Transport Cost project is implemented by The Pacific Community (SPC) and the Secretariat of the Pacific Regional Environmental Program (SPREP), as hosts of the Pacific Maritime Technology Cooperation Centre (MTCC Pacific), building upon their presence in the region and established contacts with stakeholders throughout the Pacific region on matters related to the reduction of GHG emissions from ships.

The project focuses on seven Pacific countries, namely: Cook Islands, Fiji, Marshall Islands, Solomon Islands, Tuvalu, Tonga, and Vanuatu, and aims to improve the availability of relevant maritime transport costs data in the Pacific region, including with the view to facilitating future assessments of impacts of candidate IMO GHG reduction measures in that region.

This country summary report results from desktop reviews and a fact-finding country mission by the MTCC Pacific team to Yaren District, Nauru between 22nd – 26th May 2023. This report documents the stakeholders that were consulted, the agencies, entities, and processes currently in place that collect, use, and store maritime transport costs data, and maps the availability of relevant data in Nauru.

COUNTRY PROFILE

Nauru (Naoero) is a single raised fossilised coral atoll located 42 km south of the equator with a total land area of 20 km². Despite its small land area, Nauru has an Exclusive Economic Zone (EEZ) that extends over more than 300,000 km². Its maximum height above sea level is 71m. Nauru's population in 2022 was 11,928; widely scattered along the coastal fringe of the island and there is one inland village.

Nauru's Gross Domestic Product (GDP) in 2020 was USD 117,132 million or USD 10,020 per capita. Nauru's economy faces constraints not uncommon to other small island states. Phosphate was the backbone of Nauru's economy from 1970 until 2002, when the phosphate industry collapsed. As phosphate sales started declining, the Nauru Fisheries and Marine Resources Authority used its revenue to sufficiently support the economy of Nauru and continues to do so.

Trade Summary

In 2021, Nauru recorded total **imports** of US$79m and total **exports** of US$36.4m. Compared to the previous year, this is a decrease of imports by 10% and an increase in exports of 48%. **GDP** of Nauru was US154.4m in 2021. Nauru's **trade deficit** stands at 217% as of end of 2022 fuelled by its heavy reliance on imported products.

Nauru Bureau of Statistics

The economy was boosted by an Australian offshore refugee processing centre that was opened in 2001. The centre was closed in 2008 and reopened again in 2012. The refugee processing centre became the pillar of Nauru's economy, with a significant rise in the expatriate population that resulted in major increases in revenue from customs duties and other fees and levies. Revenues from fishing licenses also contribute significantly to the economy[1]. The state-owned enterprise Republic of Nauru Phosphate Corporation (RONPHOS) maintains the phosphate industry today. Besides this, primary production such as agriculture and fishing also provide for the daily needs of the Nauruan people.

[1] The Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest or the Nauru Agreement, an undertaking in 2010 by eight Pacific nations with a quarter of the world's tuna supply imposed a common licensing scheme on foreign fishing vessels. Combined with a period of high tuna prices, this venture has since resulted in massive increases in licence fees and significant revenue for the eight signatories.

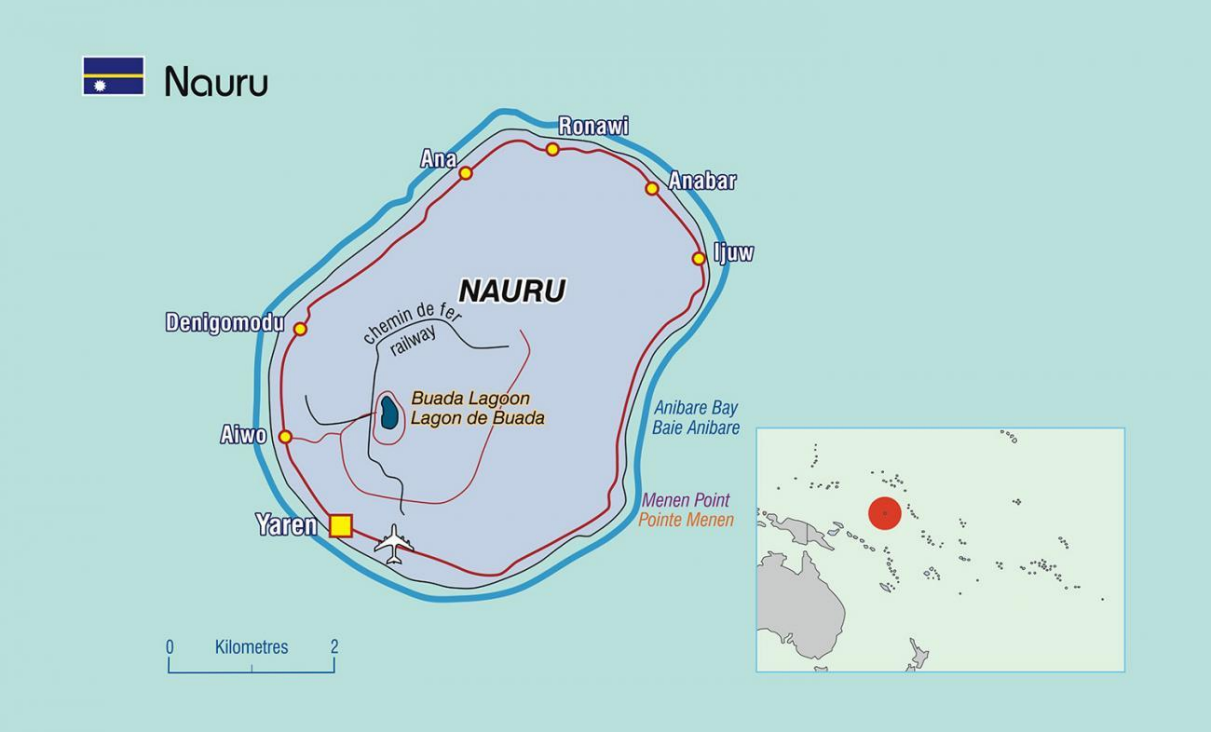


Figure 1: Map of Nauru (Source: https://www.spc.int/our-members/nauru/details, accessed 14 June 2023).

The top exports of Nauru are Non-fillet Frozen Fish, Calcium Phosphates, Cars, Delivery Trucks, and Low-voltage Protection Equipment, exporting mostly to Thailand, Saudi Arabia, Philippines, South Korea, and India. The top imports are Refined Petroleum, Tugboats, Rolled Tobacco, Cars, and Large Construction Vehicles importing mostly from Australia, China, Japan, and Nigeria.

The following pages provide the United Nations Conference on Trade and Development's (UNCTAD) General statistics[2] and Maritime profile[3] for Nauru.

[2] UNCTADstat. *General Profile: Nauru*. https://unctadstat.unctad.org/CountryProfile/GeneralProfile/en-GB/520/index.html. accessed 14 September 2023.
[3] UNCTADstat. *Maritime Profile: Nauru* https://unctadstat.unctad.org/CountryProfile/MaritimeProfile/en-GB/520/index.html. accessed 14 September 2023.

UNCTAD | STAT

GENERAL PROFILE: NAURU

GENERAL INFORMATION FOR 2022

Population
0.013 Millions

Exchange rate
1.442 AUD/US$

GDP
149 Millions current US$

Land area[1]
(q) 20 km²

CPI growth
2.57 %

GDP growth
0.34 %

INTERNATIONAL MERCHANDISE TRADE

Total merchandise trade

(millions of US$)	2005	2010	2015	2022
Merchandise exports	(e) 3	(e) 50	11	43
Merchandise imports	(e) 25	(e) 20	91	84
Merchandise trade balance	(e) -22	(e) 30	-80	-40

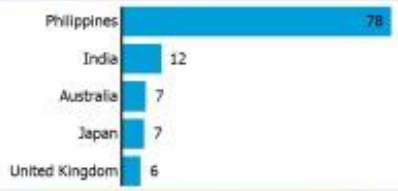
+40.2 %
Merchandise exports growth rate in 2022

Export structure by product group in 2022

(as % of total exports)

Top 5 partners in 2022

(exports, millions of US$)



INTERNATIONAL TRADE IN SERVICES

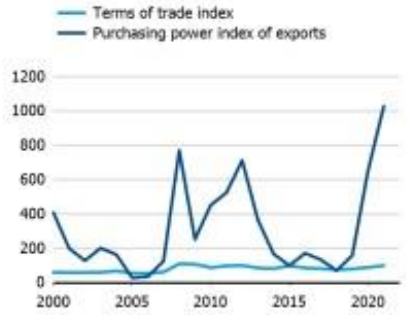
Total trade in services[2]

(millions of US$)	2005	2010	2015	2022
Services exports	-	4	22	(e) 8
Services imports	-	7	37	(e) 52
Services trade balance	-	-4	-14	(e) -43

Services exports by main category[2]

(as % of total services)	2005	2010	2015	2022
Transport	..	27.7	9.9	-
Travel	..	17.0	7.5	-
Other services	..	55.2	82.6	-

TRADE INDICES



ECONOMIC TRENDS

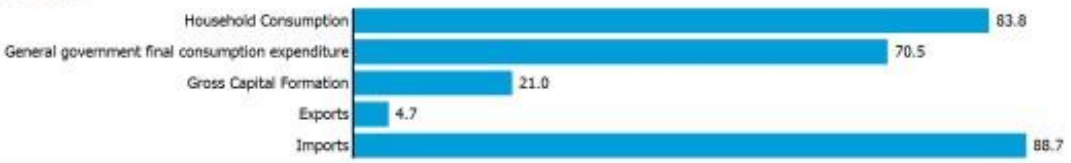
Economic indicators

(millions of US$ unless otherwise specified)	2005	2010	2015	2022
GDP, current	26	59	104	149
GDP per capita, current US$	2 548	5 788	9 330	11 733
Real GDP growth, y-on-y, %	-12.07	13.55	36.52	0.34
Current account balance, % of GDP	..	39.95	-16.00	..
Exchange rate (/US$)	1.309	1.090	1.331	1.442

+0.3 %
Gross domestic product growth rate in 2022

GDP by expenditure in 2021

(as % of total GDP)



UNCTAD | STAT

MARITIME PROFILE: NAURU

GENERAL INFORMATION FOR 2022

Population
0.013 Millions

GDP
149 Millions current US$

Merchandise trade[1]
127 Millions current US$

Land area[2]
(o) 20 Km²

GDP growth
0.34 %

Transport services trade[3]
(e) 60 Millions current US$

MARITIME KEY FIGURES FOR 2022

Coast/area ratio[2]
..

Ship building[4]
..

Ship recycling[4]
..

Fleet - National flag[5]
1 Thousands DWT

Fleet - National flag[5]
4 ships

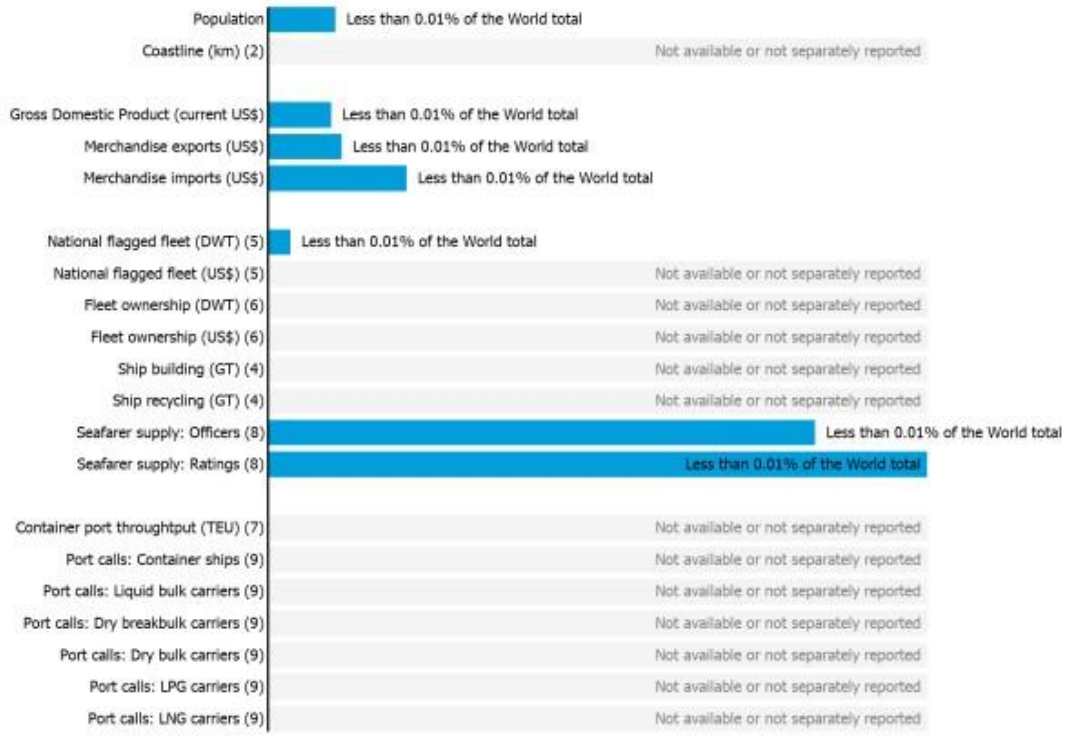
Fleet - Ownership[6]
..

Container port throughput[7]
..

Number of seafarers[8]
(l) 27

Number of port calls[9]
..

WORLD SHARES FOR 2022



INSTITUTIONAL ARRANGEMENT FOR MARITIME TRANSPORT COST DATA

Maritime Administrations

Nauru Maritime Administration as the Authority to issue all certificates necessary for a vessel to sail and trade under the Nauru flag. Its responsibilities include: (i) The registration and licensing of ships; (ii) The certification of seafarers, and (iii) The inspection of vessels to ensure compliance with safety and environmental standards.

Nauru Maritime Administration office does not collect any data relevant to this project.

National Statistics Office

Under the Department of Finance, the Nauru Bureau of Statistics (NBS) is the central statistics office in Nauru. It works in close partnership with SPC's Statistics for Development Division (SDD), where most statistical material is published.

During the in-country mission, it was shared with the MTCC Pacific staff that trade data collected by NBS was mostly mirror data out of Australia via UN Comtrade. A methodology was shared (to the MTCC Pacific team on how NBS extract data for analysis. One of the key reasons as to why mirror data was used was because local sources were limited, especially in the way that data was recorded and verified.

Customs Administrations

Nauru Customs Services (NCS) is responsible for revenue assessment of import duties, economic development through trade facilitation, protection of economic interests, security and the protection of society.

NCS has aligned its operations with national goals as identified in the Nauru Sustainable Development Strategy (NSDS) 2019-2030. The key objectives for 2020-2021 include: Improved revenue collection; Strengthening of the Customs legal framework; Establishment of a fully automated process environment; Trade facilitation; Improved compliance and enforcement; Movement towards Pacific Agreement on Closer Economic Relations (PACER) Plus Ratification; Capacity development.

At the in-country mission meeting with the NCS team responsible for the Automated System for Customs Data (ASYCUDA) project of digitizing trade data for NCS, similar sentiments were shared regarding the case of using Australia trade mirror data, accounting for 94% of data NCS work with. Nauru began using ASYCUDA - a customs management system designed by UNCTAD, fairly recently therefore their data is still in transition to be digitized and in a format that can be analysed systematically.

It was shared to the MTCC Pacific team that NCS is transitioning away from a system developed by Statistics New Zealand called PC Blue. Unfortunately, the system accumulated a lot of erroneous records and a backlog of data entry that needs to be sorted through. The rolling out of the ASYCUDA system would be effective in 2023.

Port Authorities

Nauru Maritime and Port Authority (NMPA) operates the lone small port on the west side of the island for the loading and unloading of shipping cargo as well as storage of plant and equipment for the ongoing operation of the port including the export of phosphate. Currently in the Aiwo Boat Harbour, a Deep Water Offshore Multi-Point Mooring System is used for cargo discharge and transfer to the Ports Container Parking areas. An unsafe, inefficient and difficult operation, heavily dependent on the right weather conditions.

The loading and unloading of containers in Nauru is problematic due to the direct exposure to open sea and sometimes inadequate container lifting capacity at the wharf. The poor state of repair and container handling efficiency is low, further compounding the problem and resulting in comparatively high shipping costs when compared to other Pacific Islands which have faster turnaround time. When heavy westerly weather renders the west-side port too dangerous to discharge cargo, the operation is transferred to Anibare Bay, on the eastern side of the island, where underway (drift) discharge is executed and cargo is then towed into the Anibare Community boat harbour.

Under the Asian Development Bank (ADB)'s Nauru Sustainable and Climate Resilient Connectivity Project, plans to upgrade the boat harbour into an international port has been underway since 2018. The project intends to construct a quay wall and access causeway at Aiwo, reconstruct port buildings, container storage and strengthen institutional capacity of NMPA. Other project partners include the Government of Australia and the Green Climate Fund (GCF). Originally anticipating an opening in 2021, the project has suffered further delays and additional costs due to the COVID-19 pandemic and issues surrounding delivery of infrastructure materials.

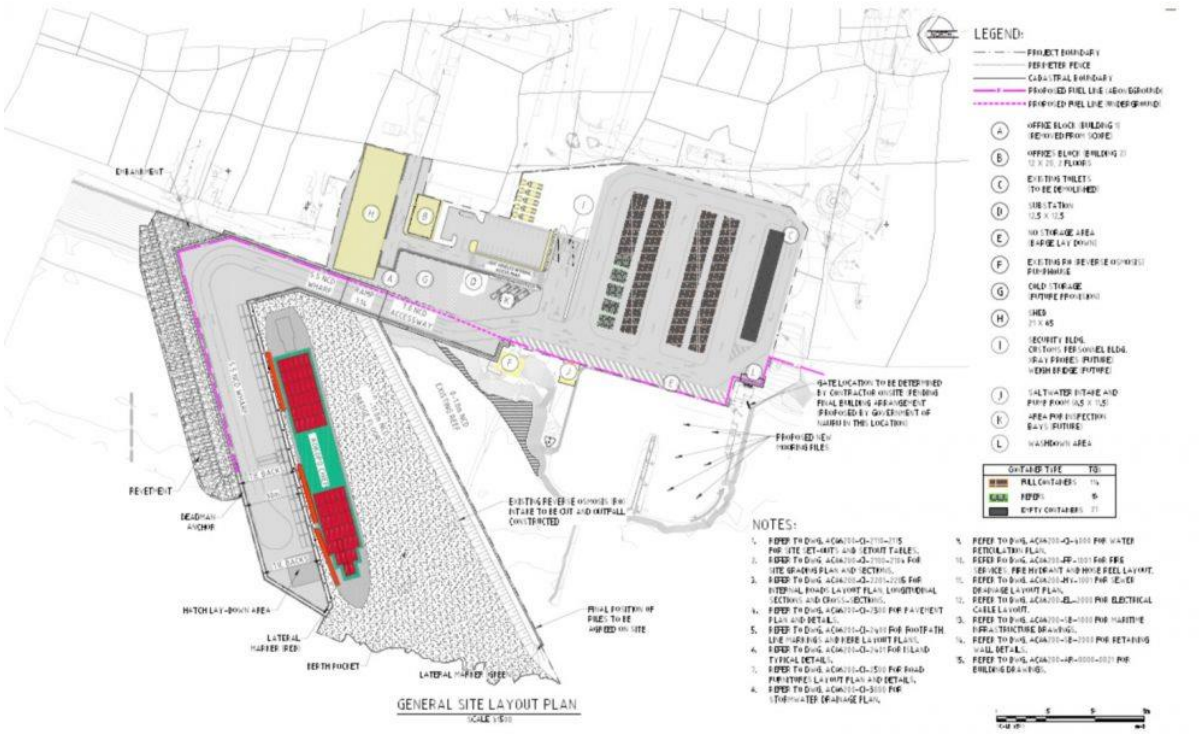


Figure 2: General site layout of the comprehensive Nauru International Port development project (source: https://www.nauruport.com/port-nauru-information/port-development-project/, accessed 30 June 2023)

At the time of the in-country mission, it was shared with the SPC staff that the newly completed wharf section allowed for proper berthing alongside and anchorage is deep enough for the MV Micronesia Pride of the Nauru Shipping Line Ltd to operate efficiently.

Shipping Agents

Nauru Shipping Line Limited (NSL) is a liner shipping service providing sea freight services the Central Pacific in particular servicing the Republic of Nauru.

Previously, Neptune Pacific Direct Shipping Line (NPDL, then called Pacific Direct Line or PDL)'s schedule integrity caused the company to forego the Nauru route and at one point left the island without food for 3 months. This created distress and mistrust with the shipping line and forced the

then Nauru government to look for alternatives that would not leave the country at a disadvantage. NSL was then established in 2020, and the company chartered an Indonesian-registered vessel and began running the route from Suva, Fiji to Nauru. NSL now own the vessel, the MV Micronesian Pride. To maintain their healthy relations with Indonesia, the vessel is fully manned by Indonesians.

NSL has maintained Fiji as its transhipment hub where cargo from Australia is collected for Nauru. NSL has also signed Swire Shipping Ltd as a service partner to bring their cargo from Australia. While currently making one port call per month into Nauru, the company estimates this may likely increase to two port calls per month in the near future. The completed wharf area at the new Port has allowed the vessel to offboard more cargo and made operations a little smoother. With Swire Shipping Ltd as a service partner, NSL has been able to retain a fixed freight rate. Rates only increased in 2022 to allow the company to recover the detention rate for Swire Shipping Ltd container usage. Freight rates are regulated by the Nauru government.

Fuel is supplied to Nauru via Vital Energy Inc., an affiliation to Vital Group, also known as "Vital" or "FSM PetroCorp, based in Pohnpei, FSM. The Vital Group is currently the largest supplier of energy lifeline products and services in FSM and Nauru. Vital supplies Nauru with Gasoline, Diesel and Aviation Fuel. Its fuel tanker makes one trip per month to the island.

STATUS OF DATA COLLECTION

Commodity Data

NCS provided International Merchandise Trade Statistics (IMTS) detailing exports and imports from 2002-2021.

Trade Data	2022	2021	2020	2019	2018	2017	2016	2015	2014
International									
Annual exports by item (HS Code), country, quanity (kg), & value									
Annual imports by item (HS Code), country, quanity (kg), & value									
Annual Re-exports by item (HS Code), country, quanity (kg), & value									
Importers - transport costs									
Exporters - transport costs									

National Macroeconomic Data

NCS supplied GDP by sector contribution data from 2004-2021 and other macro economic data for 2003-2022.

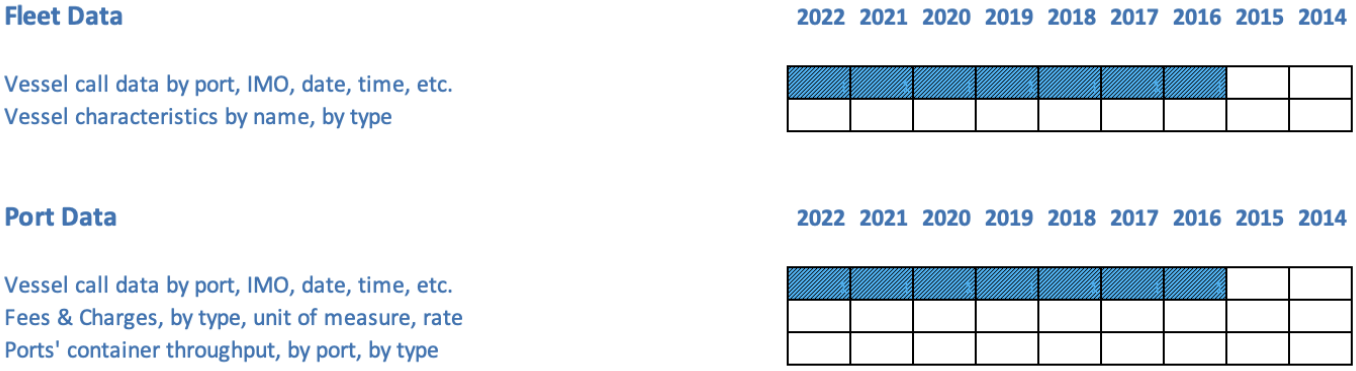
Macro Economic Data	2022	2021	2020	2019	2018	2017	2016	2015	2014
GDP - real, per capita, by sector									
Consumer price index, by month and year									
Employment statistics									

Trade Routes

AS mentioned, the only shipping line that services Nauru is NSL. Their lone route is from Suva, Fiji to Nauru once a month. There was no further information shared regarding the routes of the phosphate vessel nor the fuel tanker.

Port Calls and Ship Characteristics

NMPA shared data on vessel calls from 2016-2023.



I. Nauru Port (Aiwo Harbour) Port Calls 2016 – 2021

The consistent vessels visiting Nauru are the MV Micronesian Pride once a month (Container) from 2020, the phosphate vessel once a month (Phosphate) and the fuel tanker (Tanker) transporting Vital Energy Inc fuel from Pohnpei, Federated States of Micronesia (FSM) every two months. Previous container vessels included those from NDPL. The significant number of Landing Crafts (LC) were mainly for the new port development operations. Tugboats (Tug) were used in cargo offloading operations. This graph therefore shows the marginal shipping activity in Nauru which therefore translates to the island nation's narrow trade and economic activity.

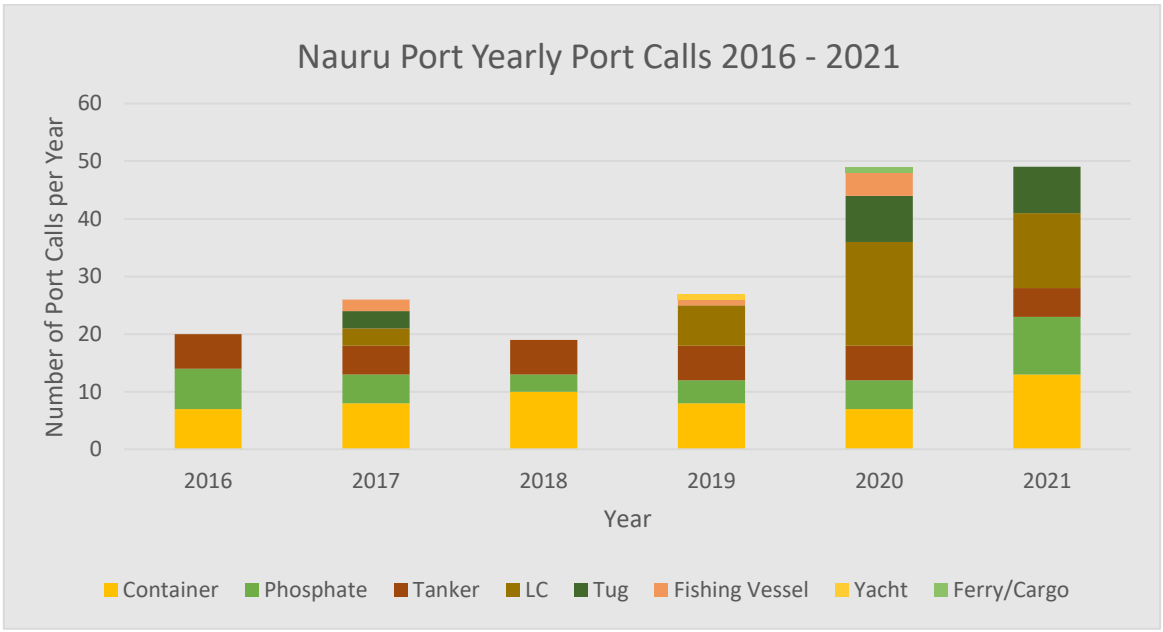


Figure 3: Nauru Port Yearly Port Calls per Vessel Type from 2016 – 2021

Annex 1 provides a high-level data mapping illustration for Nauru.

Trade Throughput

There were no cargo volumes shared with the SPC team, however, there is a dedicated, digitized data collection section at NMPA that collect all data pertaining to all Port business from 2021.

Freight Rates (*noting associated units*)

NSL shared their rates from 2020-2023, where rates had been fixed for two years from 2020-2022. 2023 saw the first increase in freight costs by the shipping line.

ISSUES AND CHALLENGES

Limited Data Sources – Nauru has limited official or centralised data sources provide comprehensive information on freight costs. While there is migration to the ASYCUDA system, the lack of established systems for data collection and reporting within connecting entities such as the NMPA and NCS, can make it challenging to gather consistent and up-to-date data.

Small Market Size – The relatively small market and economy of Nauru may result in less competition among freight providers, potentially leading to higher costs. However, this limited market may also mean less available data or transparency on freight costs.

Data Privacy and Confidentiality – With NSL being the lone shipping line, they were hesitant to share detailed freight cost data due to concerns about privacy and confidentiality, particularly when sensitive information is involved, thus further limiting the availability of accurate data.

Limited Technological Infrastructure – Limited technological infrastructure in Nauru, including challenges related to internet connectivity and data storage, has hindered data collection and reporting efforts. Compounding this is the lack of properly trained personnel in data collection, data quality assurance and quality control.

SUMMARY AND CONCLUSION

The Nauru country mission took place from 22nd – 26th May 2023 and was deployed by one SPC staff. Stakeholders from the Nauru Maritime Association, Nauru Maritime and Port Authority, Bureau of Statistics, Customs Services Office, Department of Finance Planning and Aid Division, and Nauru Shipping Line were visited during the week.

The MTCC Pacific team collected the following data sets with Annex 2 illustrating where these data are currently housed:

- Trade data from 2004 – 2023 (May)
- GDP Contributions by sector 2004 – 2021
- Port Calls and Ship Characteristics 2016 – 2021
- Freight Rates 2020 – 2023 recorded in AUD ($).

The extent of most of the data sets shared provides quite a narrow picture of actual trade and associated trade and shipping costs for Nauru.

There are many issues regarding data in Nauru. For one, whilst the existing system at NMPA demonstrates a solid foundation for data capturing, further examination revealed opportunities for enhancing the effectiveness of data management, including data capture, analysis, and monitoring. It may be beneficial to strengthen accurate analysis, reporting and monitoring measures in place and ensure that all relevant staff are made aware.

This project underscores the opportunity to advance the existing capacity for data management, including both data collection and data retention capabilities. This project highlights the need to assist and raise the capacity and capability of better data collection and retention for NBS, especially strengthening local sources of data capturing and retention. It also highlights the need to assist and raise the capacity and capability of better data collection and retention for NSL especially strengthening it as a local data source and improving data flow channels to NBS/NMPA.

Nauru is still very vulnerable. Today, the country faces two main economic risks: one, a fall in tuna prices; the other, a decision by Australia to stop funding its little-used refuge processing camp. It would be most beneficial to improve on shipping and trade statistics in order to provide a more holistic and realistic picture for the island nation's economic activities and improve economic growth opportunities.

A tracker (summary) of available data by data category and year is provided in Annex 2. Data may be made available for further analysis by contacting the IMO Secretariat but remains the property of relevant data providers. Additional information such as contact details of focal points in relevant organizations from Nauru can be provided upon request.

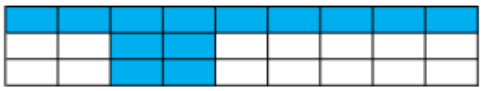
ANNEX 1: Data Mapping

ANNEX 2: Data Collection Summary

Macro Economic Data

2022 2021 2020 2019 2018 2017 2016 2015 2014

GDP - real, per capita, by sector
Consumer price index, by month and year
Employment statistics

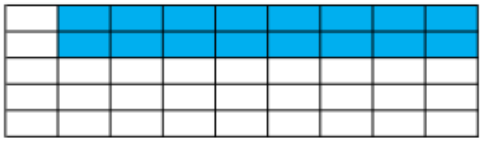


Trade Data

2022 2021 2020 2019 2018 2017 2016 2015 2014

International

Annual exports by item (HS Code), country, quanity (kg), & value
Annual imports by item (HS Code), country, quanity (kg), & value
Annual Re-exports by item (HS Code), country, quanity (kg), & value
Importers - transport costs
Exporters - transport costs



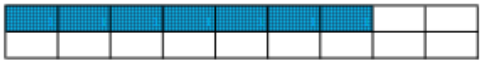
Domestic

Annual exports by item (HS Code), country, quanity (kg), & value

Fleet Data

2022 2021 2020 2019 2018 2017 2016 2015 2014

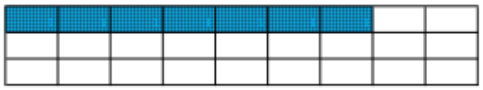
Vessel call data by port, IMO, date, time, etc.
Vessel characteristics by name, by type



Port Data

2022 2021 2020 2019 2018 2017 2016 2015 2014

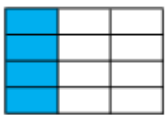
Vessel call data by port, IMO, date, time, etc.
Fees & Charges, by type, unit of measure, rate
Ports' container throughput, by port, by type

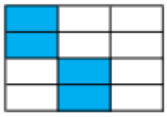


Data Mapping

Y P N

Data providers, organizations, positions, contact info, etc.
Commodity/Essential Goods data mapping
Commodity/Essential Goods economic data mapping
Trade route mapping
Data mapping
- Macro economic data
- Trade data
- Fleet data
- Port data





Notes

2023 shipping tariff rates & surcharges for Nauru Shipping Line. Suva-Nauru, Australia-Nauru, New Zealand-Nauru, Solomon Islands-Nauru
Port data for ships does not include IMO number nor port coming from or departing to
Annual exports, imports, and re-exports by HS sectors, but only rolled up. Balance of trade with other countries & region
Nauru provided an example of their international merchandise trade statistics compilation method using Comtrade db
Comtrade data provided is missing following columns:
country of origin, port of origin, point of entry, country of destination, \direction of trade, port of destination,
freight cost, insurance, surcharges, value