#### **Discussion Document**

# Towards Sustainable Port Development in the Western Indian Ocean: Location of Ports

## Background

The WIO region is experiencing unprecedented pace of large-scale developments ranging from ports, mining, roads and railways, agriculture, and oil and gas among others all principally driven by large infrastructure demands and financial inflows from different funding streams. Most of these developments are concentrated around coastal zones with rich natural resources and while the region has an opportunity to define sustainable trajectories for these investments, they have potential to significantly impact on the integrity of critical habitats and the resource base that future developments will depend on. In the WIO Region coastal communities are strongly reliant on coastal resources for their lives and livelihoods. Complimentary to the *Strategic Framework for Coastal and Marine Water Quality Monitoring and Management in the Western Indian Ocean Region* (UNEP et al. 2021 in prep), the activities proposed here seek to facilitate sustainable port development in the WIO by assessing the environmental impacts of operational, planned, and proposed ports in the WIO Region with the aim of developing different scenarios for future development, produce policy briefs and a Toolkit for Green Port Development that will contribute to sustainable port development in the Western Indian Ocean (WIO).

This discussion document presents the location of ports in the WIO region shared with country stakeholders for input and refinement (also see \*.klm file to visualise in Google Earth).

## 2. Locality of Ports

#### 2.1 Comoros

The Union of Comoros has two containerized ports located in Moroni (Grande Comore Island) and Mutsamudu (Anjouan Island) (Figure 2.1). Smaller ports are located at Fomboni (Moheli Island) and Mayotte, Longoni and Dzaoudzi (Mayotte Island). The country's major port is at Mutsamudu which accommodates a well-protected, deep-water port that can accommodate large ships. The port of Moroni situated in shallower waters are less competitive as it cannot accommodate larger ships from docking (https://dlca.logcluster.org/; https://www.comorosmaritime.org).



Figure 2.1 Location of documented ports in Union of Comoros (see Table 2.1 for more details)

## 2.2 Kenya

Kenya's major ports are in Mombasa, Malindi and Lamu, with smaller ports at Kiunga, Kilifi, Mtwapa, Funzi, Shimoni and Vanga (Figure 2.2). Ngomeni and Takaungu have been considered for future port development, with major expansion also planned for Lamu (https://www.kpa.co.ke/).



Figure 2.2 Location of documented ports in Kenya (see Table 2.1 for more details)

Table 2.1: An account of documented port and harbours in the WIO region (adapted from <a href="https://www.searates.com/maritime/">https://www.searates.com/maritime/</a>; <a href="https://http://ports.com/browse/africa/">https://adnavem.com/world/eastern-africa</a>)

COUNTRY	LOCATION	STATUS	DESCRIPTION	RESPONSIBLE AUTHORITY	COMMENTS
	Moroni 11°42'15.22"S; 43°14'53.23"E	Operational		Autorité Portuaire des Comores APC) Société Comorienne des Ports (SCP)	
	Mutsamudu 12°10'2.32"S; 44°23'30.52"E	Operational	Deep-water port	Établissement Public Port Autonome de Mutsamudu	
Comoros	Fomboni 12°17'27.31"S; 43°45'23.57"E	Operational	Very small (pier)		
	Mayotte 12°46'42.35"S; 45°14'1.57"E	Operational			
	Dzaoudzi 12°47'0.90"S; 45°15'32.26"E	Operational			
	Longoni 12°43'21.92"S; 45° 9'56.38"E	Operational			
	Mombasa 4° 3'16.78"S;39°38'41.25"E	Operational	Medium	Kenya Ports Authority (KPA)	Container handling. Also equipped to handle dry bulk (e.g., grain, fertilisers, cement, and soda ash) and liquid bulk (e.g., crude oil and oil products, as well as bagged products (coffee, tea, sugar, etc), general break-bulk (iron and steel, timber), motor vehicles, machinery
	Lamu (green field) 2°16'6.63"S;40°54'10.86"E	Under Construction	Planned as 2nd commercial port	KPA	Flagship infrastructure projects identified by Government inKenya Vision 2030
	Malindi 3°12'54.24"S;40° 7'35.56"E	Operational	Small (Pier), limited expansions planned	KPA	Landing for local fish industry and tourists. KPA intend to acquire 2,500 $\mathrm{m}^2$ of land at Manda Bay (40° 55′ E; 2° 11′ S) deep and sheltered bay with wide navigable entrance channel
	Shimoni 4°38'55.05"S;39°22'48.47"E	Operational	Very small (Jetty)	KPA	Facility for community transportation, including tourism, fishing, and trade (fishing and tourist port)
Kenya	Kilifi 3°38'14.05"S;39°50'37.47"E	Operational	Very small (Jetty) 17 m (depth)	KPA	Fishing landing and marina development
Kenya	Takaungu 3°40'42.44"S; 39°52'8.34"E	Proposed/ Planned	Recommended for future expansion		
	Ngomeni 2°59'39.06"S; 40°11'26.70"E	Proposed/ Planned	Recommended for future expansion	KPA	Potential to develop as 3 <sup>rd</sup> commercial port of Kenya but not soon (recommendation KPA acquires land around natural harbour to secure for a future development)
	Funzi 4°34'19.33"S; 39°26'2.62"E	?		KPA	
	Vanga 4°39'37.44"S; 39°13'13.00"E	?		КРА	
	Mtwapa 3°57'9.64"S; 39°44'26.56"E	?		KPA	Small scale fish landing and smaller yachts
	Kiunga 1°44'46.20"S; 41°29'31.34"E	?		КРА	Fish landing and small volume of cotton and coconut export. port KPA plans acquire 20 acres for proper fishing port for local fishing sector. Plans to dredge channel and build jetty with sea access
Madagascar	Antalaha (PIN) 14°54'2.48"S; 50°16'56.86"E	Operational	Very small	PCG	
	Antisranana (PIN) 12°16'2.29"S; 49°17'20.39"E	Operational	Small		
	Ehoala (PIN)(Fort Dauphin) 25° 3'51.95"S; 46°58'1.50"E	Operational		Port of Ehoala SA, subsidiary of Rio Tinto (private) (PCG)	Primarily handling export of dry bulk cargo, the port also handles liquid bulk containers, Ro-Ro and breakbulk Accommodates several vessel types including bulk carriers, fuel tankers, container ships, cruise lines and local coasters
	Mahajanga (PIN) 15°42'42.45"S; 46°17'53.54"E	Operational	Very small		
	Maintirano (PIR) 18° 4'41.40"S; 44° 1'36.40"E	Operational	Very small	Maritime and River Port Agency (APMF)	
	Manakara (PIR)	Operational	Very small	APMF	

COUNTRY	LOCATION	STATUS	DESCRIPTION	RESPONSIBLE AUTHORITY	COMMENTS
	22° 8'28.97"S; 48° 1'16.42"E				
	Mananjary (PIR) 21°14'30.78"S; 48°20'44.69"E	Operational	Very small	Mananjary Port Authority	
	Maroantsetra (PIR) 15°26'60.00"S 49°49'0.00"E	Operational	Very small	APMF	
	Morombe (PIR) 21°44'29.82"S; 43°21'32.68"E	Operational		APMF	
	Morondava (PIR) 20°17'39.31"S; 44°16'20.38"E	Operational	Very small	Morondava Port Authority	
	Nosy Be (PIN) 13°24'27.50"S; 48°16'52.53"E	Operational	Very small port?	APMF	
	Sainte Marie (PIR) 17° 4'58.89"S; 49°49'1.24"E	Operational		APMF	
	Taolagnaro (PIR) 25° 1'39.21"S; 46°59'49.86"E	Operational		APMF	
	Toamasina (Tamatave) (PIN) 18° 9'20.35"S; 49°25'25.82"E	Operational	Medium, major expansions underway	Société du Port Autonome de Toamasina (SPAT) (PGA)	Around 2022, part of 10 ha extension to be operational. Trade is expected to triple after full delivery of the port extension in 2025 $$
	Toliara (PIN) 23°22'41.22"S; 43°39'49.83"E	Operational	Very small	APMF	
	Vohémar (PIN) 13°21'13.77"S; 50° 0'20.97"E	Operational		(PCG)	
Mauritius	Port Louis 20° 9'29.59"S; 57°29'48.15"E	Operational	Medium, expansions planned	Mauritius Port Authority (Mauport)	Caters for containers, general cargo including dry bulk and liquid bulk, a dedicated bulk sugar berth and fishing vessels, as well as passenger traffic. There is also an oil jetty.
Maurillus	Mathurin (Rodrigues) 19°40'47.94"S; 63°25'11.99"E	Operational	Very small port	Mauport	Port area covers about 2.5 ha - Containers and passenger terminal.
	Maputo 25°58'32.02"S; 32°33'41.70"E	Operational	Medium	Maputo Port Development Company (MPDC) in partnership with Portos e Caminhos de Ferro de Mocambique (CFM)	Two main components, Maputo Cargo Terminals, including container, bulk minerals, citrus, sugar and molasses terminals and Matola Bulk Terminals 4 deep-water berths handling coal, fuel and lubricants, aluminium, and grains.  Other operatiors: Mozal (Matola – Aluminium); Grindrod/Stema (Matola grains); Oil
	Beira 19°48'56.62"S; 34°49'58.92"E	Operational	Medium, expansions planned, dredged	Cornelder de Mozambique in partnership with CFM	tanking Mozambique (fuel and lubricants)  Multi-purpose container terminal, General cargo terminal, Grain terminal, coal terminal, ship repair facilities
	Nacala 14°32'40.49"S; 40°39'56.35"E	Operational	Small (deep water port), expansions planned)	CFM	General Cargo terminal and Container terminal
Managahigus	Macuze 17°43'13.26"S; 37°11'17.40"E	Proposed/Under construction			
Mozambique	lbo 12°20'44.31"S; 40°34'52.15"E	Operational	Very small (pier)		
	Pemba 12°58'4.13"S; 40°29'13.35"E	Operational	Small, possible expansions	CFM	Small deep-water port mainly used for cabotage shipping. Good potential for growth to respond to logistics demands of new gas and oil projects in Rovuma basin
	Mocambique 15° 1'49.34"S; 40°44'8.67"E	Operational	Very small (pier)		
	Pebane 17°16'5.49"S; 38° 8'6.15"E	Operational	Very small (pier)		
	Port of Angoche 16°14'6.06"S; 39°54'2.90"E	Operational	Very small		Fishing port (Angoche Fishing Port Project – OPEC Fund)
	Quelimane 17°53'0.44"S; 36°53'0.07"E	Operational	Small	CFM	Export of regional agricultural crops such as rice, cotton and forestry products, both bulk and break bulk
	Inhambane 23°52'2.32"S; 35°22'37.17"E	Operational	Very small (pier)	CFM	
Reunion (France)	Réunion	Operational			Two ports areas: Ouest Port (old port) artificial harbour consisting of two main basins (max draught 8.5m), also fishing port and a naval base. Est Port (new port), consists of

COUNTRY	LOCATION	STATUS	DESCRIPTION	RESPONSIBLE AUTHORITY	COMMENTS
(2	20°56'10.50"S; 55°17'7.32"E (old) 20°55'52.65"S; 55°19'18.45"E (new)				a turning basin and a berthing basin (max draught 12 m). Main cargoes handled petroleum products, building materials, sugar products, grain and food produce.
	Sante Marie 20°53'34.08"S; 55°32'14.60"E	Operational	Small		Yachts harbour
	Port Victoria 4°37'24.09"S; 55°27'47.33"E	Operational	?, expansions planned	Seychelles Port Authority	Handling (loading and unloading) of all containerized cargo is the main throughput. Mahe Quay also handles dry and breakbulk cargo, fishing, military, tankers (cement, oil and gas), supply, mega and superyachts, cruise ships
	Mogadishu 2° 1'40.41"N;45°20'40.59"E	Operational	Major port	Ministry of Ports and Marine Transport (MPMT)	
	Bosaso 11°17'24.81"N;49°10'53.61"E	Operational	Major port	MPMT	
	Berbera 10°26'23.05"N; 44°59'46.21"E	Operational	Major port	Somaliland Port Authority, operated by Dubai Ports World (DP World)	
	Kismayo 0°23'7.75"S;42°32'39.27"E	Operational	Major port	MPMT	
	Las Khorey 11°10'18.48"N;48°12'1.08"E	Operational	Jetties	MPMT	
	Merca  °42'43.50"N;44°46'7.62"E	Operational	Jetties	MPMT	
	Aluula 11°58'2.52"N;50°45'21.04"E	Operational	Small port	MPMT	
	Maydh 11° 0'17.98"N;47° 6'30.77"E	Operational	Small port	MPMT	
	Lughaya 10°41'16.99"N;43°57'1.54"E	Operational	Small port	MPMT	
	Eyl 7°56'13.46"N;49°51'53.10"E	Operational	Small port	MPMT	
	Qandala 11°28'30.11"N; 49°52'18.03"E	Operational	Small port	MPMT	
	Hafun 10°24'26.26"N; 51°16'9.61"E	Operational	Small port	MPMT	
	Hobyo 5°20'32.97"N; 48°31'54.96"E	Operational	Small port	MPMT	
	Garacad 6°55'37.19"N; 49°19'6.80"E	Operational	Small port	MPMT	
	El Maan 2°10'33.68"N; 45°35'35.68"E	Operational	Small port	MPMT	
	Richards Bay 28°48'1.71"S; 32° 3'16.18"E	Operational	Large, expansions planned	National Ports Authority (parastatal) (NPA)	Major activities: exporting coal, dry bulk, break bulk and liquid bulk. Other services include bunkering, minor ship repairs and providing services to local fishing industry, ship repairs passenger vessels and recreational craft.
	Ngqura 33°48'8.81"S; 25°41'29.05"E	Operational	?, expansions planned	NPA	Mainly containers, and occasional general cargo. Manganese and liquid bulk for future
3	Port Elizabeth 33°57'41.61"S; 25°38'22.86"E	Operational	Medium, no expansion planned	NPA	With the Port of Ngqura in operation, the role is transitioning to providing premier automotive hub and waterfront port with cruise services. Offers services to local fishing, boat-repairs industries, recreational boating.
	Mossel Bay 34°10'40.69"S; 22° 8'47.60"E	Operational	Small, limited expansions planned 6.5 m (depth)	NPA	Largely cater for local fishing industry and oil and gas industry, and recreational boating. Two offshore mooring buoys inside port limits - one a marine tanker terminal single point mooring buoy
	East London 33° 1'38.73"S; 27°54'39.06"E	Operational	Small, constricted, dredged	NPA	Containers and break bulk cargoes, as well as dry bulk, liquid bulk and vehicle export
	Durban 29°52'29.43"S; 31° 1'38.49"E	Operational	Large, expansions planned	NPA	Mainly containers, also accommodates dry bulk, liquid bulk, automotive and break bulk, and services to local fishing industry, ship-repair industries, visiting cruise liner vessels and recreational boating

COUNTRY	LOCATION	STATUS	DESCRIPTION	RESPONSIBLE AUTHORITY	COMMENTS
	Durban deep-water port 29°58'55.55"S; 30°58'28.27"E	Proposed/Planned		NPA	
	Cape Town 33°54'37.49"S; 18°25'57.32"E	Operational	Medium, expansions planned port	NPA	Container, bulk and general cargo handling services (mostly agriculture). Also provides ship repair services hosts local and foreign fishing fleets, passenger liners and other recreational users.
	Saldanha 33° 0'27.22"S; 17°59'31.91"E	Operational	?, expansions planned	NPA	Primary dry bulk and liquid bulk, handling mainly iron ore (export) and crude oil (import).
	Port Nolloth 29°15'25.75"S; 16°52'1.88"	Operational	Very small (Pier, Jetty, Wharf), no expansion planned	NPA	Commercial activities limited to transfer of parts and supplies to vessels for offshore mining
	Boegoebaai 28°44'14.71"S; 16°33'25.91"E	Proposed/Planned		NPA	
	Lambers Bay 32° 5'28.44"S; 18°18'10.94"E	Operational	Small	Depart. Public Works (DPWI) & Dept Environment (DFFE)	Proclaimed fishing/small harbour
	Laaiplek 32°46'16.09"S; 18° 8'44.47"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	St Helena Bay 32°44'35.45"S; 18° 1'0.04"	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Saldanha Bay 33° 1'11.47"S; 17°57'3.05"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Hout Bay 34° 3'4.79"S 18°20'53.83"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Simons Town 34°11'16.37"S; 18°26'13.18"E	Operational	Small	South African Navy	Military harbour
	Kalk Bay 34° 7'41.09"S; 18°26'59.28"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Gordons Bay Harbour 34° 9'49.97"S; 18°51'30.18"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Arniston 34°39'58.98"S; 20°13'57.29"E	Operational	Slipway	DPWI & DFFE	Proclaimed fishing/small harbour
	Hermanus 34°26'0.52"S; 19°13'35.69"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Gansbaai 34°35'7.23"S; 19°20'36.02"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Struisbaai Harbour 34°47'58.59"S;20° 3'29.94"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Stilbaai 34°23'8.16"S; 21°25'30.51"E	Operational	Small	DPWI & DFFE	Proclaimed fishing/small harbour
	Alexander Bay 28°39'0.11"S; 16°28'47.38"E	?			
	Hondeklip Bay 30°18'58.13"S; 17°16'25.41"E	?	Small, sheltered bay		
	Elands Bay 32°18'58.69"S; 18°19'11.73"E	?	Jetty		
	Yzerfontein 33°20'46.81"S; 18° 8'58.34"E	Operational			
	Kleinbaai 34°36'58.69"S; 19°21'25.24"E	Operational	Slipway		
	Witsand 34°23'49.98"S; 20°50'15.54"E	Operational	Jetty		
	Knysna 34° 2'29.58"S; 23° 2'36.42"E	Operational	Small		
	Port St Francis 34°11'2.37"S; 24°51'7.63"E	Operational	Small		

COUNTRY	LOCATION	STATUS	DESCRIPTION	RESPONSIBLE AUTHORITY	COMMENTS
	Port Alfred 33°35'38.30"S; 26°53'33.08"E	Operational	Expansions proposed for official small harbour		
	Hole in the Wall 32° 2'5.49"S; 29° 6'50.26"E	?			
	Mdumbi 31°56'8.64"S; 29°13'5.46"E	?			
	Port St Johns 31°37'53.84"S; 29°33'9.81"E	Proposed	Proposed for official small harbour		Proposed for official small harbour
	Port Grosvenor 31°22'45.75"S; 29°54'35.76"E	? Possible			
	Shelley Beach 30°48'30.59"S; 30°24'46.53"E	Operational	Slipway	Ray Nkonyeni Local Municipality	Sonny Evans Small Craft Harbour
	St Lucia 28°22'9.82"S; 32°24'36.29"E	Operational	Jetty		In estuary
	Kosi Bay 26°57'40.07"S; 32°49'35.85"E	Operational	Jetty		Ezemvelo KZN Wildlife
	Dar es Salaam 6°49'27.88"S; 39°17'15.20"E	Operational	Large, expansion/ upgrades planned	TPA	Facilities available to support operations of Dar es salaam port are: General cargo Berth from break bulk, PORO and dry bulk, Container Terminal Berths, leased to Tanzania International Container Terminal services Ltd. Grain Terminal facility (silos with storage capacity of 30,000 tons). Inland Container Deposits (ICDs). Single Point Mooring (SPM) – for handling refined and crude oil. Kurasini oil Jetty for handling refined products.
	Tanga 5° 3'55.04"S; 39° 6'17.07"E	Operational	Small	Tanzania Ports Authority (TPA)	Lighterage port with two shallow water berths. The visiting ocean-going vessels are anchored at stream buoys being a maritime safety requirement.
	Mtwara 10°16'3.24"S; 40°11'56.43"E	Operational	Deep water port, dredged	TPA	
	Pangani 5°25'45.93"S; 38°58'32.02"E	Operational	Very small (pier)	TPA	
	Kilwa Kivinje 8°44'43.70"S; 39°24'47.21"E	Operational	Very small	TPA	
	Kilwa Masoko 8°56'26.89"S; 39°30'25.36"E	Operational	Very small	TPA	
Tanzania	Lindi 9°59'58.71"S; 39°43'8.66"E	?	Very small	TPA	
	Mafia 7°54'43.08"S; 39°39'11.61"E	Jetty	Very small	TPA	
	Bagamoyo (green field) 6°26'15.64"S; 38°56'0.75"E	Proposed		TPA	Negotiations over a multi-billion dollar port deal with China Merchant Holdings (CMH)
	Malindi (Zanzibar) 6° 9'20.28"S; 39°11'29.89"E	Operational	Small	Zanzibar Ports Corporation (ZPC)	Handles about 95% of international trade for Islands of Zanzibar. Busiest passenger terminal in East African Region.
	Mkokotoni (Zanibar) 5°52'26.70"S; 39°15'22.38"E	Operational		ZPC	North of Malindi port on Zanzibar
	Mangapwani (green field) 5°59'31.22"S; 39°10'57.71"E	Proposed		ZPC	MoU signed between government of Zanzibar and the Oman Investment Authority for construction of multipurpose port, involving construction of berths for liquid bulk goods, containers, fishing vessels, natural gas offshore services
	Wete (Pemba) 5° 3'47.99"S; 39°43'1.88"E	Operational	Very small (jetty)	ZPC	Jetty on Pemba Island handling lighters and dhows
	Mkoani (Pemba) 5°21'33.14"S; 39°38'29.60"E	Operational	Very small (pier)	ZPC	Main port of Pemba Island handling most of the import and export for Pemba with single berth
	Wesha (Pemba)	Operational	Very small (jetty)	ZPC	Jetty on Pemba Island handling lighters and dhows

### 2.3 Madagascar

Madagascar has a network of 17 seaports including Toamasina, Antsiranana, Nosy Be, Mahajanga, Toliara, Antalaha, Vohémar, Morondava, Tolagnaro, Morombe, Manakara, Maintirano, Sainte Marie, Maroantsetra and Antalaha (Figure 2.3) (Two other in rivers - Port Saint Louis and Antsohihy). Five of these ports (Antsiranana, Toliara, Vohémar, Toamasina, Tolagnaro) have adequate port facilities: wharves, drafts, land, shops, handlers, allowing commercial loading and unloading of goods at the dock (<a href="https://dlca.logcluster.org/">https://dlca.logcluster.org/</a>). Major expansions are planned at Tamatave where trade is expected to triple after full delivery of the port extension in 2025 (<a href="https://www.lejournaldesarchipels.com/2021/05/13/port-of-tamatave-an-extension-to-640-million-dollars/?lang=en">https://www.lejournaldesarchipels.com/2021/05/13/port-of-tamatave-an-extension-to-640-million-dollars/?lang=en</a>).



Figure 2.3 Location of documented ports in Madagascar (see Table 2.1 for more details)

#### 2.4 Mauritius

Mauritius has two ports, namely Port Louis (main island) and Port Mathurin (Rodriques) Figure 2.4, Table 2.1).

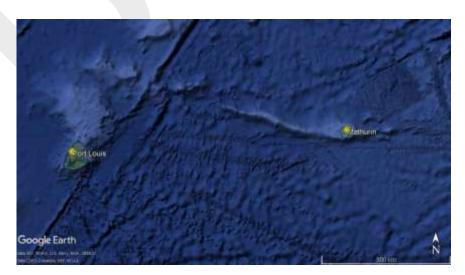


Figure 2.4 Location of documented ports in Mauritius (see Table 2.1 for more details)

#### 2.5 Mozambique

Mozambique has three main ports at Maputo, Beira and Nacala. Other smaller ports exist, such as Ibo, Pemba, Mocambique, Angoche, Pebane, Quelimane and Imhambane (Figure 2.5 and Table 2.1) (https://dlca.logcluster.org/). The construction of a new deep water port at Macuze in the Zambézia province, is expected to start in 2021 (https://furtherafrica.com/2020/03/17/construction-of-the-port-of-macuse-in-mozambique-starts-in-2021/; https://global.royalhaskoningdhv.com/projects/owners-engineer-for-the-moatize-macuze-railway-and-port-project).



Figure 2.5 Location of documented ports in Mozambique (see Table 2.1 for more details)

## 2.6 Réunion (France)

The main commercial port of Reunion, Port Réunion, comprise Ouest Port (old port) and Est Port (new port). A smaller port, Port de Sainte-Marie is in the north of the island in a marina development (Figure 2.6 and Table 2.1).



Figure 2.6 Location of documented ports in Réunion (see Table 2.1 for more details)

#### 2.7 Seychelles

Port Victoria is the main multi-purpose port of the Seychelles situated on the Island of Mahé and managed by the Seychelles Port Authority (SPA) that was Seychelles Ports Authority Act (2004) (<a href="http://www.seyport.sc/">http://www.seyport.sc/</a>) (Figure 2.7 and Table 2.1).

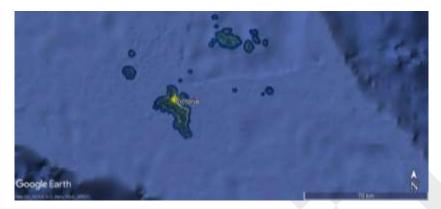


Figure 2.7 Location of documented ports in Seychelles (see Table 2.1 for more details)

#### 2.8 Somalia

The main ports of Somalia are situated at Mogadishu, Kismayo, Bossaso, and Berbera (Somaliland) (Figure 2.8 and Table 2.1) (somalitalk.com/2010/may/istambul/transport.pdf). Smaller ports (or jetties) are located El Maan, Lughaya, , Alula, Hafun, Eyl, Gracad, Hobyo, Merca, Qandala, and Maydh and Las Khorey Somaliland).



Figure 2.8 Location of documented ports in Somalia (see Table 2.1 for more details)

#### 2.9 South Africa

South Africa has eight commercial ports situated at Richards Bay, Durban, East London, Port Elizabeth, Ngqura, Mossel Bay, Cape Town and Saldanha. In addition, there are numerous smaller harbours scarred along the coast (Figure 2.8 and Table 2.1). Two commercial ports are proposed for Durban (Deep water port) and Boegoebaai. Only three of the commercial ports are in the WIO region, namely the Ports of Richards Bay, Durban, and East London.



Figure 2.9 Location of documented ports in South Africa (see Table 2.1 for more details)

#### 2.10 Tanzania

Tanzania has three main seaports at Dar e Salaam, Tanga and Mtwara (www.ports.go.tz/index.php/en/). Other smaller seaports include Kilwa, Lindi, Mafia, Pangani and Bagamoyo (dlca.logcluster.org/) (Figure 2.10 and Table 2.1). A major port development (green field) at Bagamoyo is currently being negotiated in partnership with China (www.theafricareport.com/104597/tanzania-why-bagamoyo-port-deal-with-china-is-an-uphill-battle/). The port at Malindi is the main port on the Islands of Zanzibar (Unguja), with smaller ports at Mkokotoni (Ynguja), and Wete, Wesha and Mkonani (Pemba) (https://zpc.go.tz/). In January 2021, the government of Zanzibar also signed a memorandum of understanding with Oman for the development of a multi-purpose port at Mangapwani (Unguja) (https://www.thecitizen.co.tz/tanzania/news/-zanzibar-oman-sign-mou-on-new-multipurpose-port-3273252).



Figure 2.10 Location of documented ports in Tanzania (including Islands of Zanzibar) (see Table 2.1 for more details)

## 3. Proposed List of Ports for Detailed Assessment

This project will also undertake a more detailed geo-reference analysis considering the proximity of important coastal marine ecosystems to a selection of larger commercial ports, either operational, under construction, or proposed/planned. Table 3.1 present a proposed list of selected ports in each of the countries to be consider by and confirmed with stakeholders.

Table 3.1: List of major large commercial ports in the WIO regions considered in this assessment

COUNTRY	COMMERCIAL PORT	AUTHORITY		
Comoros	Port of Moroni	Société Comorienne des Ports		
	Port of Mombasa			
Kenya	Port of Lamu (under construction)	Kenya Ports Authority		
	Ngomeni (proposed)			
	Port of Ehoala (under construction?)	Port of Ehoala SA, subsidiary of Rio Tinto		
Madagascar	Port of Toamasina	Société du Port Autonome de Toamasina		
	Port of Mahajanga			
Mauritius	Port of Port Louis	Mauritius Port Authority (Mauport)		
	Port of Maputo	Maputo Port Development Company, plus: Mozal (Matola – Aluminium) Grindrod/Stema (Matola grains) Oiltanking Mozambique (fuel and lubricants)		
Mozambique	Port of Nacala	CDN (Northern Development Corridor) together with Maputo Port Development Company		
	Port of Beira	Cornelder de Mozambique together with Maputo Port Development Company		
Reunion (France)	Port Réunion	Port Réunion Port Authority		
Seychelles	Port Victoria	Seychelles Port Authority		
Somalia	Port of Berbera	Berbera Port Authority (parastatal)		
South Africa (WIO coast)	Port of Richards Bay Port of Durban Deepwater Port Durban (proposed) Port of East London	Transnet National Ports Authority (State-owned enterprise)		
Tanzania	Port of Dar es Salaam Port of Malindi (Zanzibar)	Tanzania Ports Authority		
	Port of Bagamoyo (under construction)	Multi-billion-dollar port deal with China Merchant Holdings (CMH)		