

Tunisia

Tunisia Report: Overview of Maritime Situation and related Organizations in Tunisia

I- Country overview:

Tunisia is a country laid at the extreme north of Africa. Opened to the Mediterranean Sea from the north and east parts, Tunisia is endowed with more than 1300 km of coast line giving access to both eastern and western Mediterranean basins.

At the inland side, Tunisia is bounded to the west and southwest by Algeria and to the southeast by Libya, counting 163.610 km² of land extent and around 12 million of population. Its characterized by moderate relief and minor inland waterways. The Majadra River is the only continuously flowing stream which flows through the Majadra valley in the northwest and empties into the Gulf of Tunis close to the site of ancient Carthage in the northeast (Figure 1). It is still not used for maritime transport, however, it could be an alternative in the future.



(Source: Encyclopedia Britannica, Inc.)



Tunisia has known an intense maritime activity since antiquity. Its coasts have notably integrated its way of life and the commercial activities of its inhabitants. Moreover, the first signs of interest in the sea appear from prehistoric times. Many remains scattered on the Tunisian coast testify to this. But it was with the foundation of Carthage that the Carthaginians made our country one of the first bridgeheads of international maritime trade not only towards Europe but also towards Africa.

Admittedly, Carthage was above all a maritime power through its war and transport fleet. Frigates, under full sail, continued to ensure this commercial exchange by sea until the invention of the steam engine.

Tunisia has invaluable assets in terms of marine natural heritage and living and non-living marine resources that can, if effectively exploited, enable the country to strengthen its development capacities.

The following identified indicators demonstrate the economic and social importance of the maritime sector in Tunisia:

- 96,600 direct jobs and 289,000 indirect jobs in the maritime sector,
- 98% of Tunisia's foreign trade is carried out by sea,
- A major port infrastructure made up of 41 fishing ports, 8 commercial seaports which annually ensure the transit of 30 million tonnes of goods, 65% of which are exchanged with European ports and 8 marinas; the activity of pleasure crafts generated by these ports is increasingly confirmed and constitutes a promising niche for the development of the tourism sector in Tunisia,
- Fishing in Tunisia is an important economic activity representing 13% of GDP where 15% of production is exported. The sector employs 100,000 people, including 60,000 directly (fishing activities) and 40,000 indirectly, mainly in the food industry.
- Despite intensive tourist and seaside activity before the Covid-19 pandemic, several Tunisian beaches have often been ranked among the best in the world in terms of purity and transparency of the sea water giving the country a competitive advantage among other Mediterranean countries.

II- Tunisia's maritime situation overview:

- 1- Maritime risks and country challenges:
 - 1.1. Climate change and intensified fishing and tourism activities:

A providential geographical position at the crossroads of the world with 99,701 km² of total maritime areas (to limit of executive economic zone), Tunisia is also exposed to an intense maritime activity.

The country's major coastal cities suffer from a strong littoralisation marked by a concentration of more than 80% of industries on the coast, 95% of the hotel capacity and more than 70% of total population.

Moreover, being at the heart of the Mediterranean and as many of other countries, Tunisia is facing lot of challenges. The area is most exposed to the effects of climate change faces the risks of erosion and sea level rise.

According to modeling and forecast tools, up to 200 000 people may be displaced by flooding and sea level rise by the year 2100 (Figure 2). A similar occurrence would likewise stop all commercial activity, seriously harm any structures, and perhaps deter tourism activities.



(Source: Earth.org)

Figure 2: Sea level rise projections by 2100

Furthermore, intensified fishing activities and the widespread of illegal, unreported and unregulated fishing has harmfully affected the fauna and the flora and threatened the biodiversity and the stability of the ecosystem.

In this respect Tunisia has been involved in the creation of Marine Protected Areas (MPA) in accordance with the Barcelona convention, ratified since 1977.

The aims of MPAs are mainly:

- Make sure to safeguard endemic, vulnerable, uncommon, or endangered species as well as special marine ecosystems,
- Raising public awareness on the fragility of natural resources and the need to protect and manage the natural environment,
- Promoting artisanal and environment friendly fishing methods and,
- Encouraging more sustainable tourism activities and products that respect the environment.

Tunisia have 19 MPAs, however, it represents only less than 1% of the total maritime area (761 km^{2}) .

The following table summarize the most important MPAs and its percentage of the total maritime area.

Zone Name	Site Marine Area (km2)	Site Percent of Total Marine Area in Tunisia
Lagune of Boughrara	369,1	0,4%
Jerba Bin El Ouediane	89,3	0,1%
Archipel of La Galite	82,1	0,1%
Zembra & Zembretta	76,1	0,1%
Kneiss iles	52	0,1%
Lagune of Ghar El Melh & delta of medjerda	35,4	< 0,1%

(Source: mpatlas.org)

Table 1: Tunisia's Most important MPAs

1.2. Maritime transport and major incidents:

Tunisia coasts are widely open to massive maritime traffic. Particularly the north and northeast coasts through which nearly 30% of international trade maritime traffic transits. Hence, the Tunisian coasts are exposed to the risk of accidents and pollution incidents generated by this traffic.

Some of major maritime incidents have been occurred recently in Tunisian coasts which seriously threatened the marine environment. Citing the following examples:

1.2.1. Grounding of M/T XELO:

The bunker tanker ship XELO has been sank in Golf of Gabes on 15 April 2022 after engine room flooding. On the night of 14 April, in the midst of a storm, her crew sent out a distress signal and sought refuge in the Gulf of Gabes. The crew was successfully evacuated, but the ship sank early morning of the next day in shallow water.



Figure 3: M/T XELO

The Equatorial Guinea-flagged ship was carrying 750 tonnes of diesel fuel as ship master declaration. After investigations it reveals that the ship tanks were loaded with seawater. Minor oil leakage from engines have been pumped out and no marine pollution has been detected.

The ship built since 1977 has a long series of detentions and deficiencies on her port state control inspection record, including a two-week detention in Neapolis, Greece in February 2022. Her fire pumps, SOLAS equipment, charts, and anchoring systems were among the elements that inspectors discovered to be defective.

Moreover, the crew has declared that the ship was sailing from Damietta port heading to Malta. However, Damietta Port control has denied this declaration. In fact, XELO was in Malta anchorage area before she heads to Sfax port then to Golf of Gabes according to AIS (Automatic Identification System) tracking data, strengthening the assumption that the vessel in question is an oil smuggling freighter that is sailing illegally or there was a volunteering action to get rid of the old ship. Nowadays, the crew has been released and investigations still in process to answer those questions.

1.2.2. Sinking of M/T LADY SANDRA:

Lady Sandra is a river tanker ship that has been breaking in two in Malta anchorage area in 25 March 2020 due to bad weather conditions. The stern part was drifted to reach Tunisian territorial water close to Djerba island, threatening Tunisian coasts of marine pollution. Uncertain how this inland tanker built in 1975 entered the Mediterranean and who authorized this river ship to navigate high seas, especially though she was only deployed for bunkering.



(Source: Maltatoday.com)

Figure 4: M/T LADY SANDRA after breakage

Fortunately, that the crew members have been successfully rescued and no pollution have been reported. The ship has sunk later on after towing it away from shore.

1.2.3. M/V HAMADA S grounding:

HAMADA S is a General Cargo that was built in 1979 and is sailing under the flag of Togo. In 11 December 2019, the ship has run aground after dredging its anchor in the coast of Bizerte. The ship apparently came from Algeria around two weeks ago to undergo repairs, but due to safety concerns, it was not permitted to transit through the Bizerte Canal. The disassembled cargo equipment and overall impression of a neglected vessel give her the appearance of being ready for scrap.



Figure 5: M/V HAMADA S grounding off Bizerte coast

1.2.4. Grounding of an "Unanimous" ship:

The story was about a Turkish shipping company that purchased a Nigerian tanker, whose transfer to Turkey was appointed to an Italian tug. The latter faced the waves during a storm at sea on Friday 12 December 2014, which forced the tug boat to abandon the tanker. Finally, the ship was found grounded in the coast of Kuriat island in Tunisian maritime domain.



Figure 6: Grounded Tanker off Kuriat island coast

To conclude, the most common factor that relate the above accidents that happened few years ago is that all of them are aged of more than 40 years. Moreover, those incident have been occurred in maritime protected area which gravely affected the maritime environment and seriously threatened biodiversity and rare protected species living within it.

Tunisian Authorities have to pay more attention to those kind of ships by enhancing border monitoring and surveillance, increases ship inspections, enforcing laws and regulations and to heavily penalize uncompliant ships.

- 2. Maritime sector organizational scheme:
 - 2.1. Ministry of Transport:

The maritime transport and administration sectors in Tunisia are governed and supervised by the Ministry of Transport. The Ministry of Transport's mission is to establish, maintain and develop a global, integrated and coordinated transport system that contributes to promoting sustainable economic and social development and to ensure that people's transport needs are met in the best possible way and conditions, in particular, in terms of safety, security, cost, quality and environmental protection. The transport system includes the activities of land, sea and air transports and logistics.

The following diagram explain how the Tunisian Minister of Transport is organized and where the maritime sector is being managed.



Figure 7: Ministry of Transport Organizational Chart

As figure 7 shows the maritime sector which is laid under the specific services of the ministry is supervised by the general directorate of maritime transports and commercial maritime ports while the Office of Merchant Marine and Ports (OMMP) that works under its auspices is the executive organization of the ministry in terms of development of maritime sector in general.

2.1.1. Office of Merchant Marine and Ports:

The Office of the Merchant Marine and Ports was established under the authority of Law No. 65-2 of February 12, 1965, as amended by Law No. 15 of February 1972.

The OMMP was required to carry out the attributions confided to the maritime authority and administration as well as the duties of port authority in line with Law in effect No. 98/109, issued December 28th, 1998.

The OMMP is a public organization with legal and financial independence which represent both maritime and ports authorities as the following Figure shows.



Figure 8: The OMMP main tasks

The OMMP is headed by a CEO where under his supervision two general directors are responsible for ensuring maritime and port authorities tasks.

A- The Maritime Authority:

It ensures the maritime administration's jurisdiction and authority mainly through three directorate dedicated to three primary tasks:

• The directorate of fleet and maritime navigation that:

- Formulate and execute the national and international legislation pertaining to the management of the maritime fleet, particularly the administration of ship safety.
- Participate in the work of national and international bodies that are focused on the management and safety of ships, including the processes of ships building.
- Provide technical and maintenance studies involved in building and modifying ships,
- Issue certifications of approval for the equipment and materials used in maritime safety
- Conduct inspections and provide safety certificates, and
- Handle maritime investigations.

• The directorate of seafarers that:

- Guarantees that the national and international laws and regulations are followed and enforced,
- Makes sure that seafarers are qualified and certified,
- Formulates and implements laws, regulations, and orders, in accordance with international conventions ratified by Tunisia such as the Standards of Training, Certification and Watch-keeping for Seafarers convention as amended (STCW 2010) and the Maritime Labor Convention (MLC 2006),
- Inspects and enforces procedures on maritime labor and monitor the good management on board commercial vessels,
- Bilaterally coordinates with foreign authorities for the purpose of confirming the legitimacy and authenticity of the certificates granted to sailors by maritime authorities,
- Ensures the implementation of quality system at the seafarer's department.

• The management unit by objectives:

It is a department responsible of maritime regulatory intelligence. It main purpose is to keep an eye on updates and trends in the maritime legal framework internationally. It lookout as well on the right implementation of ratified convention on national law, to rise difficulties in its application to the maritime authority and to propose corrective plans. It takes part in the creation of projects for national decrees and orders that will go into effect. It coordinates also with international bodies in terms of voluntary audits and keeping up with IMO agenda.

To ensure its responsibilities and services throughout the Tunisian territory, the maritime authority, beside it headquarter, is represented by a number of regional, districts and sub-districts offices as the following table shows.

	7 maritime regions		3 maritime districts	19 maritime sub-districts
-	The Maritime Region of	-	Tabarka district, under the	Ghar El Melh, Beni Khiar,
	Bizerte		supervision of the Maritime	Hammamet,
-	The Maritime Region of		Region of Bizerte	Sidi Bou Said, Rades,
	Tunis	-	Kelibia district, under the	Kantaoui, La Chebba,
-	The Maritime Region of		supervision of the	Maritime complex of
	Sousse		Maritime Region of Tunis	Monastir, Sayada,
-	The Maritime Region of			Teboulba, Ellouza,
	Monastir	-	Mahdia district, under the	Kerkennah, El Mahres,
-	The Maritime Region of		supervision of the	Sekhira, Zarat,
	Sfax		Maritime to the Monastir	Ghannouch, Zarzis, Ajim
-	The Maritime Region of		Region	and Ketaf.
	Gabes			
-	The Maritime Region of			
	Djerba			

Table 2: Tunisian regional maritime offices

Their duties are to:

- Represent the OMMP in regional commissions,
- Register all kind of vessels like fishing boats, pleasure crafts and commercial ships,
- Manage wrecks,
- Register sailors, issue maritime seafarers booklets and track their career at sea,
- Coordinate between seafarers and ship-owners to establish reconciliations,
- Conduct surveys as part of the port state and flag state inspections, and
- Conduct maritime investigations.

B- The Port Authority:

As port authority, the Tunisian maritime commercial ports are managed by the OMMP. It is offering and ensuring the best conditions for the management of ships and cargoes through Tunisian commercial ports in terms of time, cost, safety, and security. Its primary responsibilities include also the update of port services and ongoing development plans, the expansion of ports operations, increasing performances, monitoring the security and effectiveness of all commercial activities and developing ports strategical projects in partnership with the private sector.

The OMMP is managing ports as landlord governance model. Cargo handling services are secured by public and private companies but the OMMP still providing pilotage and towage services.

In addition to the above tasks, the port authority is responsible to ensure to all ships and port users the safety, security and environment protection throughout all port logistics chain segments in accordance with the law inforce and the ISM and ISPS codes.

- From sea to berth:

Safety starts at sea; such is the rule. From the harbor, a Vessel Traffic Service (VTS) takes in charge of the ship until it docks. Before the ship is allowed to proceed inside, the harbor pilot must be onboard to monitor and secure the safety of the ship maneuver operation. The harbor master's office controls all the maneuvers carried out on the route to be followed to enter or leave the inner basins as well as any movement inside the port.

Radio contact is maintained between the harbor master's office and the ship at all times 24 hours a day.

- <u>At berth:</u>

Specific safety measures are taken for each cargo handling operation especially of loading or unloading petroleum products, chemicals and dangerous cargo. Port operators and officers of each port can thus identify the cargo and the nature of the risk that may arise, as well as the measures to be taken to avoid any risks or incidents. In this context, the harbor master ensures the control of declarations of any arrival in its facilities as well as goods classified as dangerous whether for import or export.

Port officers are also responsible of all ships docking, mooring, unmooring and undocking operations. Monitor loading, unloading, handling and removal of goods and

controlling access and movement of people, vehicles and machinery within the port enclosure.

In other perspective, the port authority plays an active role in coordinating interventions from all the authorities and ports operators by setting up security and port safety committees, reinforcing also security in ports through the assessment of security measures and the means of detecting and extinguishing fires, identifying and analyzing of possible risks to the environment and the implementation of internal operation plans in the event of pollution. It has the obligation to equip all commercial seaports with marine pollution control equipment and to train the port personnel through periodic drills, exercises and simulation on a regional or even international scale.

Regarding port security, all commercial seaports covered by the OMMP are in compliance with the provisions of the ISPS code. Since 2004, the port authority has proactively treated security issues by approving the security audits and plans scheme (Port Facility Security Assessment and Port Facility Security Plan) even before the entry into force of the code and it have been audited each year.

Port Facility Security Officers have been designated in all ports and agents have been trained in accordance with the provisions of the ISPS code and in coordination with the International Maritime Organization (IMO) and the competent international and national organizations.

Security exercises have been also carried out each year in coordination with other authorities concerned and ships docked in the ports. Nevertheless, the OMMP has invested in means of enhancing security in ports through installing scanners to ensure effective control of containers, scanners for screening passengers and their baggage, truck scanners for vehicle and a remote surveillance system to control port enclosures.

2.1.2. TUNISIA PORTS CHAIN:

As mentioned before Tunisia has 8 commercial ports which through it 98% of international trade of the country is secured.



Figure 9: Tunisia's commercial port chain

• <u>Bizerte/Menzel-Bourguiba Port</u>:

The port of Bizerte/Menzel Bourguiba is a multipurpose port with direct access to the sea through a channel with a depth of up to 12 meters. The average traffic of goods generated by the port of Bizerte amounts to 5 millions of tons per year. The port is giving access to Bizerte lake where a shipyard of 4 dry-docks locate.



Figure 10: Bizerte Port



Figure 11: Menzel-Bourguiba port

The port of Bizerte-Menzel Bourguiba has 520 linear meters of standard docks in addition to 5 docks that are dedicated to the handling of hydrocarbons, cereals, steel, cement and clinker, and metallurgic items. The port hinterland is hosting 9 industrial estates with a surface area of 172.5 ha and a business park of 51 ha within it 533 industrial firms are established operating mainly in oil refining, metallurgical industry, cement works, mechanical, electric, food processing, textile and leather industries.

POSTE N°	LENGTH (M)	DRAUGHT (M)
1	100	9.30
2-3-4	260	9.65
5	160	9.80
Cereals jetty	200	9.75
Tunis Acier	120	9
Oil jetty A	250	10,67
Oil jetty B	150	8.25

The main port facilities are as follow:

Table 3: Bizerte Port Facilities (North part)

POSTE N°	LENGTH (M)	DRAUGHT (M)
South Dock	150	9,50
Honour Dock	100	5
North jetty N°2	150	7,60
South jetty N°2	150	6,70
Cement Dock	180	10,50
Support dock	90	5,50
Oxy Dock	16	6,20

Table 4: Menzel-Bourguiba shipyard docks and jetties

• La Goulette Port:

The port of La Goulette, situated in the capital city of Tunisia, is specialized in receiving passenger and cruise ships. It also receives RO-RO ships (Rolling on-Rolling off) transporting: cars, trailers and vehicles.



Figure 12: La Goulette Port

The access to the port is insured via a channel of 3.5 nm and 12m of depth. The port accommodates as well warehouses of 35 600 m2 total surface, 25 ha of quay side platform, a passenger station of 1160 cars capacity, a waiting room of $5200m^2$ and 1096m of total quay length as detailed in the following table:

POSTE N°	LENGTH (M)	DRAUGHT (M)
1Bis	150	5.10
1	150	8,2
2	150	8,2
3	150	8.8
4	150	8.8
5	150	8.8
6	150	8.8
7	150	8.8
C1	335	9.00
C2	335	8.8

 Table 5: La Goulette Port Facilities

• <u>Rades Port</u>:

Rades port is the main commercial seaport of the greater Tunis area. Geographically, it is the extension of the passenger port of La Goulette in the South Bank of the access canal. It compromises two terminals for both containers and bulk cargo like it shows in the figure below.



Figure 12 : La Goulette and Rades port location Map

The commercial port of Rades comprises two terminals, one is specialized in containers and rolling units and the other one is composed with specialized berths.

The Customs-controlled zone of the container and RO-RO terminal has a surface of 48ha, containing 6 hangars with a total surface of 50ha, 3ha of which are warehouses.

The following table summarize the port facility infrastructure:

POSTE N°	LENGTH (M)	DRAUGHT (M)
1	150	9,00
2	205	9,00
3	205	9,15
4	205	9,00
5	205	9,00
6	140	9,00
7	180	9,15
Oil jetty	170	9,45
SILO	190	9,75
DGX DOCK	130	7,20

Table 6: Rades Port Facilities

• <u>Sousse Port</u>:

Established since 1885, the port of Sousse is located at the center of the eastern coast of Tunisia. It is composed of two independent areas separated by a basin of 21ha dredged to 10,5m with a 400m turning circle. It is specialized in the handling of various goods and some small cruise ships traffic.



Figure 13: Port of Sousse

The port is composed with the following infrastructures:

POSTE N°	LENGTH (M)	DRAUGHT (M)
1	115	8,50
2		8,50
3	170	8,50
4		8,50
5	170	8,50
6	170	8,50

Table 7:	Sousse	Port	Facilities
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• <u>Sfax port</u>:

Located in the eastern south of Tunisian coasts, Sfax port is a multipurpose port. Its main traffic consists in solid bulk such as phosphate, sea salt, cereals and containers. Based in the biggest

industrial city of the country, the port hinterland contains more than 2300 firms, around 800 of them are exporting diversified products.

The port is composed with an access channel of 10,5m depth and 6,15km of length and three basins of 62ha of surface in which a turning circle of 300m diameter is based.



Figure 14: Sfax Port

POSTE N°	LENGTH (M)	DRAUGHT (M)
1	150	10.50
2	220	10.50
3	245	10.50
4,5,6	584	10.50
7,8,9	520	10.50
10	60	10.50
11	150	10.50
12,13,14	517	10.50
15	110	10.50
Oil Quay	150	10.50

The docking structure consist of 15 berths distributed as follows:

Table 8: Sfax Port Facilities

• La Skhira Port:

It is a port dedicated to wet bulk traffic mainly petroleum and chemical products such as oil and acids. It is located about 350 km south of the capital Tunis. It has an important infrastructure of storage of crude oil and oil refined products, as well as loading and unloading pipelines.



Figure 15: La Skhira Port

It is mainly composed of three berths constructed on dukes of alba where two of them are oil posts of 300m of length and a depth of 15m which they can receive tanker ships of 120000 tonnes loading capacity and one post for phosphoric acid of 150m of length and a depth of 8.7m.

• <u>Gabes Port</u>:

The commercial port of Gabes is located in the southern part of the country, whose activity is characterized by an industrial vocation. It essentially ensures the handling of chemical products on behalf of the neighboring factories located in the industrial zone of Gabes.

It is specialized in all kind of either wet or bulk cargoes. This bulk traffic consists mainly of sulfur, ammonia, gas and cereals on import and phosphoric acid, phosphate fertilizers and cements products on export.

The channel of the port is 3,22Km of length and 13.5m of depth giving access to the outer basin of 50 Ha dredged to 12.5m and an inner basin of 30 Ha with 10.5m of depth. The turning circle have a diameter of around 600m.



Figure 16: Gabes Port

The main docking offer 1725m of quay length dedicated to commercial ships which structured as follows:

POSTE N°	LENGTH (M)	DRAUGHT (M)
3	140m	10.5
4	200m	10.5
5	200m	10.5
6	200m	10.5
7	200m	10.5
8	260m	11
9	225m	11
10	300m	11
Service Quay	139m	5

Table 9: Gabes Port Facilities

• <u>Zarzis Port</u>:

The Port of Zarzis is located in the extreme southern part of Tunisia. It takes charge of the commercial exchange of the region, consisting mainly in exporting sea salt and crude oil and importing pure oil products. It has been equipped lately with a passenger terminal.

The port is accessible via a dredged channel of 5nm length and 11m of depth where it opens to a main basin of 35ha and 11m deep with a turning circle of 450m diameter.



Figure 17: Zarzis Port

The port has a land reserve covering an area of 135 hectares in the port public domain, located on the West side of the harbor and bounded on the North by the city and in the South by the sea, dedicated to the establishment of projects in conjunction with port activity. It covers also 41ha of quay side land and around 9000m² of covered areas. The quay descriptions are as follow:

POSTE N°	LENGTH (M)	DRAUGHT (M)
1	150	11
2	150	11
3	150	11
4	150	11
Oil Jetty	175	10
Quay Service	155	5.5



III- Tunisia Maritime related organizations:

The maritime sector is mainly managed by mostly public organizations supervised by Ministries. As the following figure shows, 5 main Ministries are engaged in the maritime sector.



Figure 18: Main maritime related organizations in Tunisia

1- The ministry of environment:

It is in charge of protecting the environment through proposing and applying the general policy of the State in the fields of the protection of the environment, the safeguard of nature, the promotion of the quality of life and the establishment of the foundations of sustainable development in the State policies. In the maritime field, to perform its obligations, the Ministry have under its auspices a number of organizations.

CPPA: The Coastal Protection and Planning Agency is missioned to implement the state policy in the area of coastal protection and development. It protects the maritime public domain against illegal occupation. Also, it is in charge of the rehabilitation and management of natural coastal areas, conducts research and studies related to the protection of coasts and the development of natural and sensitive areas.

- NEPA: The National Environmental Protection Agency actively participate in the development of the government's general policy in the fight against marine pollution and environment protection including the maritime sector. Its ensure the implementation of regulations and law enforcement through specific and global actions within the framework of the national development plan.
- ICETT: The International Center for Environmental Technologies of Tunis works to strengthen the capacities of Tunisia and Arab-African and Mediterranean counties in the field of environment protection and the sustainable management of natural resources through skills development and capacity building.
- CPA/RAC: In the framework of the application of Barcelona convention, Tunisia has been hosting the Regional Activity Center for specially protected areas that was established by the contracting parties in order to assist Mediterranean countries in implementing the protocol concerning specially protected areas and biological diversity in the Mediterranean.

2- Ministry of Agriculture:

The management of fishing activities and regulations are assigned to The Ministry of Agriculture which undertakes within the scope of the tasks entrusted to it the preparation of:

- Agricultural development plans within the scope of national economic and social development plans
- Sectoral programs for the development of agriculture and fisheries,
- Studies related to various elements and means aimed at developing the agricultural sector, and
- Preparing legislative drafts and regulatory texts for the advancement of agriculture and ensuring their implementation.

The Ministry has the obligation of managing 41 fishing ports established all around the Tunisian coasts through the Agency of the Harbors and Fishing Facilities (AHFF).

The assignments of the AFHH are:

- Exploiting, managing, and developing the fishing harbors,
- The management of the harbor public domain,
- The exercise of the harbor police,
- Supplying different kind of services to fishing boats, and
- The involvement in some studies about fishing harbors extension.

3- Ministry of Defense and the Ministry of Interior:

Both ministries are globally in charge of protecting Tunisia's territorial sea and its Exclusive Economic Zone from illegal activities and border crossing. The Ministry of Interior has the obligation of monitoring illegal fishing activities and inforce the law on uncompliant fishing boats. Through the coast guard service, it has the obligation of ensuring Search and Rescue (SAR) activities.

The Ministry of Defense beside its obligation of monitoring ships traffic transiting Tunisian waters through Tunisian Navy Force, it has other organizations engaged in the maritime field

Citing the following:

- The Naval Academy: It is the only Maritime University that has the role of ensuring the training of officers for both the Navy and the Merchant Marine in the military fields and the techniques of navigation. It organizes also cycles of complementary or refreshment training such as STCW trainings and conduct scientific and technical research in the maritime field in favor of public or private organizations.
- NCMRS: The National Center for Cartography and Remote Sensing is ensuring bathymetric survey and monitoring coast line changes. It provides as well paper and electronic navigational charts of Tunisian maritime areas.
- Buoy service: The Ministry ensures through this service the maintenance of all buoys and maritime signals in all Tunisian ports and coasts.

4- Ministry of Transport:

It is the major actor in the maritime field as described before (Paragraph II-2.1). It has a number of organization to fulfill its obligations.

- ➤ OMMP: (See Paragraph II-2.1.1)
- STAM: Tunisian Stevedoring Company is a public owned company that operate in Tunisian ports to secure cargo handling operations with other private companies except the port of Rades where it has the monopole. The STAM ensure ship to shore cargoes operations and the management of quay side land and storage areas through concession agreement with ports authorities.
- CTN: The Tunisian Navigation Company is a shipping company that mainly works in regular line with south Europe. It manly carry trucks, trailers, containers and passengers through 6 RO-RO/Pax ferries.
- SONOTRAK: It is a local ferry company that provide passenger and vehicles transport services between Sfax and Kerkenah archipelago.
- IMFMM: The Mediterranean Training for Maritime jobs institution is specialized in maritime transport and ports logistics education and training. It offers courses for both deck and engine seafarers in accordance with STCW convention as well as complementary trainings.
- INM: The National Institution of Meteorology take cares of meteorological maritime and aeronautical weather forecast, issuing notice to mariners and supports research groups in meteorology and geophysics.

5- Ministry of Tourism:

It is mainly involved in the maritime sector by managing 8 marinas.

Beside public sector, the private sector is also involved in the maritime affairs. Some of Tunisian flagged ships are operating under private shipping companies in the fields of international transport and offshore supplying. In addition, the private sector contribution appears in according other services such as ship repairs and maintenance, ships mooring and cargo handling operations.



Uganda

CURRENT SITUATION OF UGANDA'S MARITIME INDUSTRY

Uganda is a land linked country with a land surface area of 241,550 square kilometers area. 18% of Uganda's surface area is covered with water bodies and swamps. The country is also endowed with a number of navigable waterways and these are Lake Victoria (shared between Uganda, Kenya and Tanzania), Lake Albert (shared between Uganda and Democratic Republic of Congo), Lake Kyoga, Lake Edward and George.



Location of Uganda on World Map (Geoscience News and information, 2022)

As a land linked country, Uganda is dependent on the Ports of Mombasa in Kenya and Port of Dar Es Salaam in Tanzania for the importation and exportation of all her cargo.

The Ugandan government under the Ministry of Works and Transport established the Maritime Administration in 2016 responsible for regulating the water transport and started operational in 2017. Since then the Maritime administration has put up the new laws and regulations to replace the old ones that were obsolete. The current laws governing water transport are:

- the Inland Water Transport Act 2021,
- Lake Victoria Transport Act, 2007, and
- Rivers Act, 1907.

Currently the Maritime Administration is in the process of developing regulations to operationalize for the Inland Water Transport Act 2021.

Uganda became a member of IMO in 2009 and in 2018 acceded to the following IMO Conventions: International Convention for Safety of Life at Sea, 1974 (SOLAS 1974), International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL 73/78), Convention on Facilitation of International Maritime traffic, 1965 (FAL 1965), Convention on the International Regulations for Preventing Collisions at Sea 1972 (COLREG 1972), International convention on Load line (LL), International Convention on Standards of Training, Certification and Watch keeping for Seafarers, 1978 (STCW 1978), International Convention on Standards of Training, Certification and Watch keeping for Fishing Vessel Personnel, 1995 (STCW-F 1995).

Nine (9) Search and Rescue centers are being set up at the respective inland waterbodies. There is also a maritime call centre under the 110 code that has been established together with a Maritime Rescue Coordination Centre (MRCC) for the purposes of supporting the safety of seafarers on our waterways.

Lake Victoria is the main navigable waterbody in Uganda that is used for the transportation of cargo imports and exports for Uganda. Lake Victoria is a transboundary lake that is shared between Uganda, Kenya and Tanzania. To facilitate the cargo movement on this lake, there are

3 main ports, and these are Port Bell and Jinja Port for Uganda, Kisumu Port for Kenya and Mwanza Port in Tanzania.

Port Bell: This is the main port for Uganda handling most of the import and export cargo. The port facility is connected by road and railway line linking it to the hinterland of the three East African Countries. The port is also served with railway wagon ferries that enhance this linkage.

Ships and ferries operate between this port and Jinja, Kisumu Port of Kenya, Musoma, Mwanza and Dar-es-salaam of Tanzania.



Vessel on dry dock at Port Bell

Port of Jinja: This is the second largest port in Uganda after Port Bell and it is situated on Lake. Just like Port Bell, the port is served with a railway link span as shown below.



Link span at Port Jinja

Bukasa Inland Port: Uganda plans to construct a cargo port facility to boost the country's trade network since all other port facilities are limited to expansion. The Bukasa port development started in 2019 however it stopped midway due to the government's demand of renegotiating its financial agreement with the German port development firms and involving African companies to reduce costs. The port is expected to become fully operational by 2030 and would comprise administration offices, wharves, multi-purpose terminals and shipyards. The port would handle around 5 million tonnes of goods every year.



Plan of Port Bukasa

CONCLUSION

Maritime Administration is still in the infancy stage having been established 5 years ago. Currently, the Maritime Administration is focusing on setting up systems such as, development of laws and regulations. Mostly, the international cooperation and partnership under Sustainable Development Goal 17 (United Nations, 2022) ought to be important and recommended for capacity building and resources for continual development. All hands should be put to the deck towards development of the maritime sector to grow steadily and more efficiently to great standards in Uganda.

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Japan

Overview of the Current Maritime Situation in Japan

Yusuke Mori (Japan, 2014)



Photo by Andreas Dress on Unsplash

1. Governmental Organization

In 2001, as the reorganisation of central ministries and agencies, the Ministry of Transport, which has jurisdiction over land, water and air transportation, railways, ports, ships, automobile traffic, and weather, the Ministry of Construction, which has responsibility for social infrastructure development such as city planning, roads, buildings, housing, rivers and government building, Hokkaido Development Agency, which carries out comprehensive development affairs in Hokkaido, and National Land Agency, which has jurisdiction over land, water resources, remote island development, disaster countermeasures, and metropolitan area policies were merged into one Ministry. The scale of the reorganisation was particularly large. The Maritime Bureau under the ministry is the bureau which responsible for maritime-related affairs. In the bureau, there are 9 divisions: General affairs division, Ship safety division, Ocean development and environment policy division, Seafarers policy division, international shipping division, Inspection and measurement division and seafarers license and maritime

promotion division.

2. Shipping

2.1 International Shipping

In Japan, 99.5% (in 2020, on a tonnage basis) of the trade volume (total of imports and exports) is transported by sea, and the Japanese merchant fleet covers 60.1% of this maritime trade volume. Japanese merchant fleet refers to ocean-going merchant ships of 2,000 gross tons or more operated by Japanese ship companies, consisting of Japanese-flagged ships and foreign-flagged ships (ships chartered by foreign companies). In particular, Japanese-flagged ships are the core of Japanese economic security in terms of transporting goods to sustain the lives of the people in the case of an emergency. In 2021, there are approximately 2,340 merchant fleets operated for international shipping which accounts for 10 % of world freight movement.



Container yard in Tokyo - Photo by Ari Ara on Unsplash

2.2 Coastal Shipping

Coastal shipping plays an important role as a fundamental transportation infrastructure in supporting the lives of people and economic activities in Japan, accounting for about 40% of domestic cargo transportation and about 80% of the transportation of basic industrial goods such as steel, petroleum products, and cement. Moreover, in the event of recent disasters, emergency transportation has fully demonstrated its function as an alternative to land transportation. On the

other hand, since the transportation of basic industrial goods accounts for the majority of transportation demand, due to factors such as population decline, contraction of domestic demand, and changes in industrial structure due to the development of international competition, the transportation volume of overall coastal cargo reached its peak in 1990, and it has decreased in recent years. There are about 5,240 merchant fleets operating for coastal shipping.

2.3 Seafarers

From the point of view of economic safety and security, it is necessary to retain and educate a certain number of Japanese ocean-going seafarers. However, the number of Japanese ocean-going seafarers is about 2,200, which has not changed in recent years. Although there are 28,000 seafarers serving for domestic shipping, 44.6% of them are over the age of 50, accounting for about half of the total. In 2021, the number of seafarers serving domestic shipping below 30 years old was about 5,660 (19.8% of the total), and the number of young seafarers has been gradually increasing in recent years. Of the approximately 31,000 domestic and international Japanese seafarers, 870 are women.

3. Ports

It is known that Japan opened its ports in order to export green tea and silk. Since then, ports have been important in our lives as Japan relies on 99.7% of natural resources by import; there are 102 major ports in Japan. In these ports, 5 are defined as "international container hubs": Tokyo, Yokohama, Kawasaki, Osaka, and Kobe. And there are 18 major international ports in Japan. In fact, the total number of ports is 808 in Japan, and when including the fishing ports, the number is more than 3,000.

4. Maritime Education and Training

In Japan, there are 2 maritime universities, 5 maritime colleges and 7 maritime schools which provide seafarer education and training (certification training). Both maritime universities and maritime colleges are the places where their graduates would obtain the certificate of competency for the officer in charge of the watch (operational level certificate, navigation, and engineering), while graduates from maritime colleges obtain certificates for the support level. Most international seafarers are graduates of universities or colleges. At the high school level, Maritime colleges provide education and training for students who would mainly serve domestic shipping. What is unique about the seafarer education system in Japan is

that most of these students have their onboard training on dedicated training ships. The MET institution owns and operates 5 dedicated training ships, including two sailing ships.

5. Shipbuilding and Machinery Industries

The shipbuilding industry contributes to economic security by providing a stable supply of ships for maritime transport, which is essential for Japan as the nation is surrounded by sea. In addition, as a broad-based industry, it contributes to the local economy and employment. The industry also plays an important role in national security as they build and repair all the destroyer and patrol ships that are indispensable for national defence and coast guard. In general, as the overseas production ratio of the manufacturing industry increases, the shipbuilding industry maintains domestic production bases, and most of them are located in rural areas, making it a valuable industry. Especially in Setouchi and northern Kyushu, there are many areas where the shipbuilding industry plays a central role in the regional economy and employment as a major manufacturing industry. There are 790 shipbuilding yards capable of constructing vessels over 20 GT, and 80 of them can build vessels of more than 2,500 GT.