



The Republic of Comoros Country Profile



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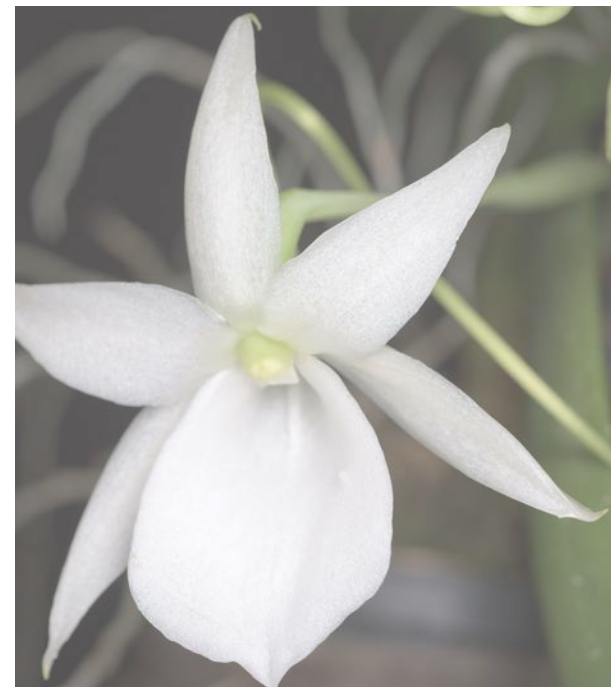
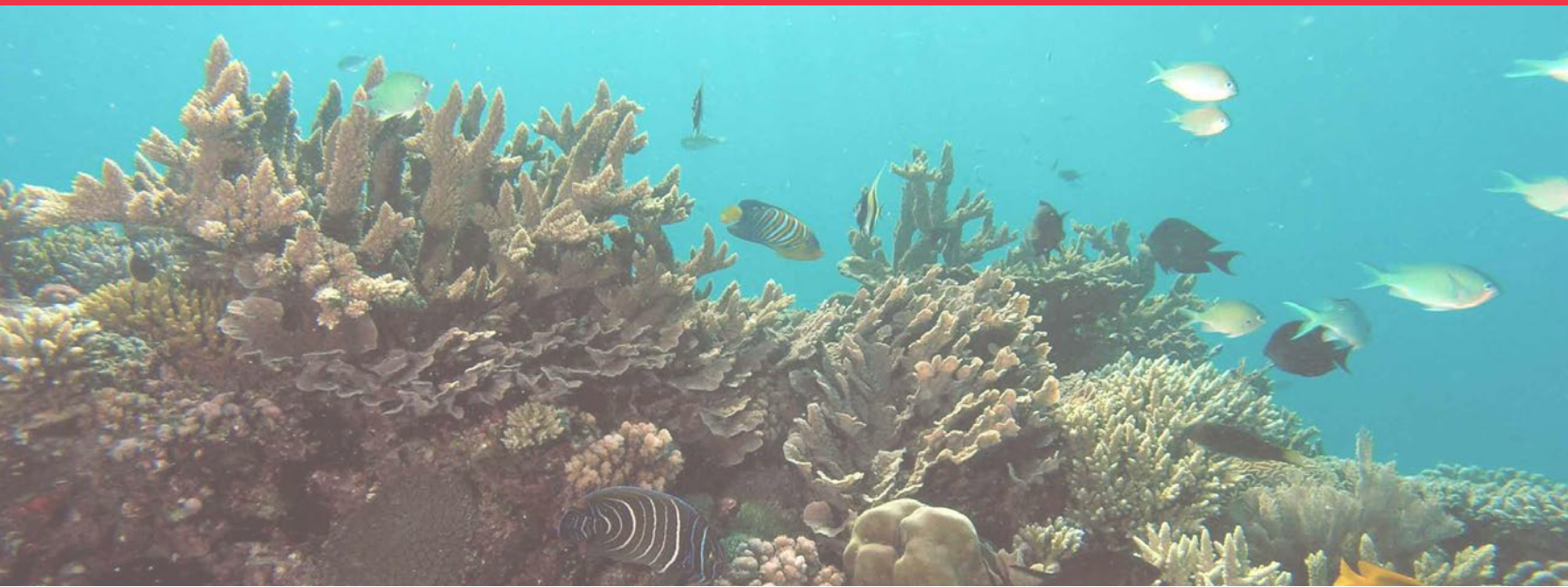




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The Republic of Comoros

Key Country indicators

Location

The Comoros is an archipelago in the Indian Ocean at the northern part of the Mozambique Channel. This archipelago is located between East African coast and the northern tip of Madagascar and is composed of four volcanic islands, namely, the Grande Comoro, measuring 1,148 km², the Moheli measuring 290 km², Anjouan measuring 424km² and Mayotte measuring 370 km² and under the French administration. The country enjoys an EEZ of about 160,000 km² and a coastline stretching to over 427 kilometres (FAO, 2014).

Population	788,000
GDP US \$ (billion)	0.5657
GNI	
Total land area	1,900 km ²
Length of coastline	427 km
Exclusive Economic Zone	160,000 km ²
Continental shelf	km ²
Mangrove	1.2 km ²
Coral reef	430 km ²
Marine protected area	%0.3 of territorial water

Source: (World Bank, 2017)

Comorian population stands at 788,000 inhabitants (World Bank, 2007) with the majority of the population living below the poverty line. The Union of Comoros is one of the Small Island Developing States (SIDS) with a GDP of US \$ 565.7 million(source). Comoros mainly depends on cash crops for agriculture, with main cash crops being vanilla, cloves, ylang-ylang and jasmine. It also relies heavily on fishing for both food and as a means of employment.

Marine resources

Three types of coastal environment exists in Comoros. These includes sand beaches, mangrove forests and rocky shores. The west coast of the Grande Comore, a volcanic island, very rocky limiting accessibility. Some parts of Comore and Grande have sandy beaches contrasting sharply with the west coast of Grande Comore (DNEF, 2010). These sandy beaches contribute significantly to the Comoros economy through the tourism sector. However, the anthropogenic interference of natural environment, for instance sand extraction, have resulted into the loss and degradation of these beaches.

Marine resources

Comoros' coastal ecosystem consists of rocky shores (predominantly along the west coast of Grande Comoro), sand beaches, coral reefs, seagrass beds and mangrove forest.

Mangrove forests

Comoros has about 120 ha of mangroves (FAO 2007). The south coast of the island of Moheli hosts 75 per cent of the mangrove forest resource, which are predominant in Damou and Mapiachingo. Some also grow in the Grande Comore and Anjouan islands. There are seven species of mangrove found in Comoros, namely, *Cerriops togal*, *Heritiera*, *Lumnitzera*, *Sonneratia*, *Bruguiera gymnorrhiza*,



Rhizophora mucronata and Avicennia marina. The last two are the most common and expansive species (source).

Comorian mangroves have not been subject to major exploitation by humans. The mangroves are in a reasonable conservation state as observed in the Mohéli Marine Park. Most mangrove grow along protected shorelines in tropical and subtropical areas and normally consists of about 60 per cent shrubs and trees, and about 20 per cent consisting of non-mangrove species.

The Comorian mangrove plays a critical in sustaining the coastal ecosystem. The mangrove is home to species such as molluscs, algae and fish; and act as nurseries for fish due to the abundance of food around them. The decaying mangrove matter is rich in minerals and nutrients hence provides fuel for bacteria and fungi floral.

Coral reefs

The vast of the Comorian coral reef develop alongside the volcanic shore. They development along the steep shores vary depending on the age of the islands and other factors such as the undersea and local conditions. The total area of coral reef coverage in Comoros is 11,000 ha(source). Almost 60 per cent of the Grande Comoro's coastline is covered with coral. As regards Anjouan and Moheli coastlines, the estimates range between 80 and 100 per cent respectively(source). The contribution of the coral reef to the Comorian coastal ecosystem cannot be gainsaid. They offer food resources to most coastal species, protect the coastlines by dissipating wave energy, act as nurseries for fish and have medicinal value.

Seagrass beds

Seagrass play a crucial role in the protection and conservation of the coastal biodiversity and ecosystems. They act as meadow for turtles and dugongs. In Comoros, there exists about 8 species of seagrass namely, Halodule uninervis, Halophila ovalis, Syringodium isoetifolium, Cymodocea rotundata, Enhalus acoroides, Cymodocea serrulata, Halophila stipulacea and Thalassia hemprichii (ASCLME, 2012).

Seagrass distribution along the Comoros coastline is dependent on a number of coastal factors such as salinity, sedimentation, the concentration of herbivores, and light. Favourable conditions and the complete restructuring has resulted into the largest concentration of seagrass at the Moheli Marine Park. Other areas worth noting are the seagrass beds at Male, Bimbini, Mitsamiouli and Ouroveni. In Grande Comoro, seagrasses are most found at the Mitsamihouli Ndroude, Male and Chindini

Ecosystem management and conservation

The challenge

The Comorian marine ecosystem offers a platform for the realization of economic empowerment however there are some challenges to meeting this opportunity. These include overexploitation of resources, poaching, limited data to support decision making and limited investment in the sector.



The Situation

Degradation of mangrove forests and sea grasses ecosystem

The loss of mangrove in Comoros has been due to over harvesting of firewood, charcoal and timber mainly because of a population influx in the coastal areas. There has also been coastal infrastructural development in Grande Comore and Anjouan Domomi; and the constant need of land for human housing, effects of climate change, effects coastal industrial developments and changes in sediment flows have posed great challenges to the mangrove forests(source).

The increase of terrigenous deposits from fresh water streams and discharge of wastewater in rivers which support the growth of seagrasses have also caused an imbalance in the ecosystem. Other challenges include soil erosion, deforestation and sand mining.

Environmental impacts on coral

Bleaching is one of the major negative impacts on coral and is as a result of rise in water temperature triggered by climate change. Rapid coastal urbanization and activities, which has accelerated marine pollution. Unregulated and unsustainable methods of fishing such trawling and seining which damage coral reef thus interfering with their development. Extraction for construction and other coastal development purposes. Dredging for beach enrichment and maintenance.

Protecting coral reef is not an option. Considering that coral reef in Comoros produce about 3000 tons of reef fish per year (translating to 2 billion Comorian francs annually) their protection is paramount (source). Unfortunately, the last decade has witnessed massive degradation of Comorian coral reef. About 30 per cent of the coral reef in Comoros got damaged with 60 per cent struggling with the pollution and ocean acidification challenges(source).

The constraints

Overexploitation of resources

Overexploitation of sand, pebbles and sediments

Poaching

Threatened species such as dugongs and sea turtles due to poaching. Limited data on marine assessments

Weak institutions

There is an absence of collaborative linkages between the institutions involved in the management of marine resources. Some of the reasons for this include the lack of technical expertise, poor technology, limited private investment and limited research conducted.

The opportunity

Ecosystem resources can support economic growth

The Comorian marine ecosystem offers a platform for the realization of economic empowerment to both the state and the Comorian population. The sector offer employment opportunity through sectors such as fishing and tourism. To the state, it earns it income in terms of contribution to the GDP.



Protected areas

Comoros has come a long way to ensure sustainable management and protection of the marine and coastal ecosystems. Notably, in 2001 it declared its first protected area, the Moheli National Park. To date, it is still the only protected, though it includes ten marine reserves. Most importantly, the Park is co-managed by the community and the state. The rationale is to improve the livelihood of the adjacent community while at the same time ensuring marine conservation.

Tremendous progress has been made in terms of policy and future projection. Comoros intends to create three marine national parks, namely the Mitsamiouli-Ndroude, Shisiwani and Coelacanth national park. Such a move will push Comoros towards achieving 25 per cent of national territory being under protected areas by 2021.

Fisheries

The challenge

Fishing is the second largest income earner for the economy after agriculture. However, the value has been decreasing due to poverty, poor fishing practices and added vulnerability to external shocks such as climate change.

The situation

Fisheries resources

Fishing in Comoros is mainly small scale targeting pelagic fish and species such as the Serranidae, Lutjanidae and Lethrinidae. However, industrial and semi-industrial fishing also exist. After agriculture, fishing is the second largest contributor to the economy. For instance, in 2013, the contribution of fishing to the GDP was estimated at 8 per cent, marking a decrease from 15 per cent in 2010 (source).

These maritime resources, sustains the three types of fishing occurring in Comoros, namely, the artisanal, traditional and industrial fishing. Inshore fishing in Comoros most exploited using traditional fishing methods by artisanal fishers while the deep-sea fishing, characterized as bulk capture, is normally conducted by foreign vessels.

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Considering the narrow outline of the Comorian continental shelf, fishing is mostly in the ocean surface water and target tuna species which have thrived in Comoros mainly because Comoros is situated along the migratory path if tuna and swordfish. Tuna is primarily harvested using purse seining vessels from foreign states. The main tuna and tuna-like species include: *Thunnus albacares*, *Thunnus alalonga*, *Katsuwonus pelamis*, *Istiophorus platypterus*, *Euthynnus affinis* and *Thunnus obesus* (source)



Food security

The fisheries sector plays a critical role in promoting food security. The sector also offers employment as shown below:

Year	2000	2010	2012	2013	2014
People employment	7,700	10,400	10,400	11,400	11,400

Source: (FAO, 2020)

Fish has been a source of food and income for community residing along the coastal zone. However, due to its longest history of coups and political instability, Comoros has been exposed to intense hunger (source). Scarcity and accessibility of resources has been a challenge to majority of the Comorian population for some time now.

The constraints

Weak institutions

The sector is not well developed. Some of the results of the weak institutions are pollution and degradation are continuing unabated. Sand and stone mining degrade the fishing ground, discharge of waste into the marine ecosystem, deforestation, poaching of green turtles, increased coastal development and lack of data for assessment purposes

Political upheaval

Comoros has undergone serious political crises, which have affected its political development until now. The past period of political instability and turmoil resulted into jurisdictional conflicts and confusion in institutional management. However, the concept of democracy, which is slowly overturning the era of turmoil, has improved governance in Comoros.

The opportunity

Legal framework

The Constitution of Comoros May 2010: The revised constitution forms the basis of marine governance since it provides some autonomy to the respective islands as regards their administration. It states that the Republic of Comoros shall consist of autonomous islands of Moheli, Ndzuwani (Anjouan), N'gazidja (Grande Comore), and Maore (Mayotte) (Article 1 of the Union of Comoros Constitution). According to the Constitution non-industrial fishing falls within the jurisdiction of the autonomous islands (Article 9). Any other type of fishing is under the jurisdiction of the Union. It further provides for the ratification of treaties and trade agreements (subject to Parliaments approval) which relate to international organization.

Institutional framework

The Fisheries sector: The fisheries sector is under the administration of the ministry of agriculture and fisheries and further delegated to the General Directorate of Fishery Resources headed by the General Director. Due to lack capacity and financial capability, the sector has not been able to

perform to its optimum. While fisheries falls under the Union's ministry of agriculture and fisheries, each island in Comoros has a directorate of fisheries appointed by the governor.

The National Institute for Agriculture, Fisheries and Environment (NIAFE): is responsible for conducting research fisheries and its related biological and socio-economic dynamics. Although the Institute is lauded for its scientific research contribution to the fisheries sectors, its functions have been limited by the absence of fisheries plan, financial empowerment and limited training.

The Directorate of Marine Affairs of the Ministry of Transport: has the mandate to register vessels flying Comorian flag. In the past vessel, a private company conducted registration (FAO, 2014). The Directorate has to ensure vessels satisfy and live up to the marine safety standards before registration.





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Western Indian Ocean Large Marine
Ecosystems Strategic Action Programme
Policy Harmonisation and Institutional Reforms
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