

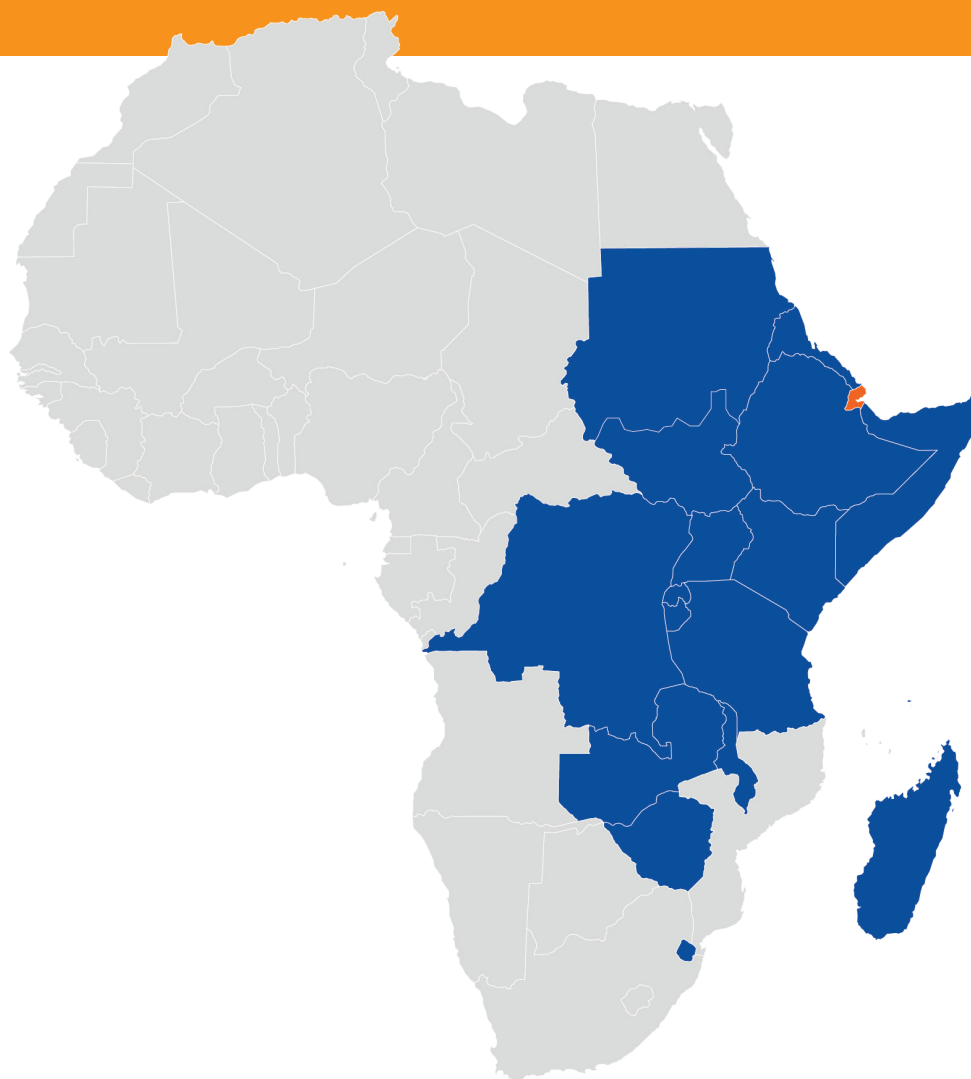


Fisheries in the ESA-IO Region: Profile and Trends

COUNTRY REVIEW

2014

DJIBOUTI





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This document was prepared as part of the activities of the Indian Ocean Commission (IOC) SmartFish Programme, under the FAO Fisheries management component, in the monitoring and analysis of major issues with implications for fisheries and aquaculture in the twenty countries from the Eastern Southern Africa-IOC region participating in the Programme. This has resulted in the preparation of twenty country baselines whose purpose is to serve as easy-to-read and informative references for policy decision-makers, fishery managers, development partners and stakeholders. The baselines inventory and describe for each country the trends in status of fisheries, major social and economic dynamics of relevance to the fishery sector, policy, legal and administrative frameworks, and management regimes. The present document relates to the baseline for Djibouti.

The preparation mainly involved Mr Christophe Breuil and Mr Damien Grima, FAO consultants, who made essential contribution in drafting the text and developing infographic for publication on the basis of the analysis of official and grey literature and vast field experience in the region. Much gratitude is due to all SmartFish experts who act as reviser. In particular, Ms Clotilde Bodiguel Chief Technical Adviser of IOC SmartFish activities implemented by FAO, who provided the initiative, was instrumental in the editing and Mrs Florence Wallemacq, Outreach Consultant, assisted in the formatting for publication. Lastly, the editor would like to thank National and Regional Focal Points of the IOC SmartFish Programme for providing complementary data and information.



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BACKGROUND INFORMATION

1 Brief on the National Economy

Key figures on Macro economic data

2014- Source World data Bank - Latest reported data



Djibouti is situated in the Horn of Africa, at the junction of the Red Sea and the Gulf of Aden, and is bordered by Eritrea, Ethiopia and Somalia (Somaliland semi-autonomous region). The country is separated from Yemen by the Bab-El-Mandeb Detroit. Djibouti has a surface area of approximately 23,000 km² and a mainland coastline of approximately 380 km. It is generally not considered to be a resource-rich country. Natural resources are considered moderately or un-exploited and include marine fishery resources and some minerals including salt from Lake Assal, bore, oil, gypsum and gold in particular. Djibouti is largely a semi-desertic country with few arable areas. The population of Djibouti was estimated at about 860,000 in 2012 with a growth rate close to 1.5%.

Djibouti's economy is dominated by the tertiary sector, including transport, communications, commerce and tourism, which accounts for 73% of GDP and employs most of the working population, with transport and related logistical services remaining the backbone of the economy (OECD et al. 2013). The secondary sector, including construction and manufacturing, is growing but the agriculture sector (including fisheries) is marginal. The resource base of the agriculture sector is largely under-exploited and accounts for only 4% of GDP (FAO Djibouti Country Programming Framework, 2013-2017, draft version).

The Djiboutian economy has experienced zero growth since 2007. The situation now appears to be improving however thanks to the recent growth of two main drivers of the economy, port activity and direct foreign investment from the Gulf States (port infrastructure, roads, buildings, hotels). In 2012, total GDP in Djibouti was close to US \$1.3 billion and the estimated GDP per capita was US \$1,399 (Mehler A.; Melber H.; Van Walraven K. 2014).

Djibouti is placed at a strategic crossroads of major sea routes for trading oils and other goods and its objective is to become a hub for commercial, logistical and financial services for the Gulf of Aden countries (OECD et al. 2013). Significant investment programmes have been launched including the construction of new port facilities for salt and potassium exports. Other ambitious programmes are in the pipeline including up-grading the railway line between Djibouti and Ethiopia and improving roads following a regional integration agreement signed with Ethiopia and South Sudan as part of the Common Market for Eastern and Southern Africa (COMESA). It should be noted that the government has also announced the construction of a fishing port at Domerzoug (OECD et al. 2013).

The private sector is very small due to the dominant economic role of the government and various business climate obstacles including high production costs (energy, water and salaries). According to the World Bank's 'Doing Business 2013' report, Djibouti ranked 171 out of 185 economies in its ease of doing business in 2012. The business climate could soon improve thanks to new, important water and energy infrastructure projects.

Inflation in Djibouti is dependent on the price of two main imports, food and oil, but has remained moderate, except during droughts or food shortages, thanks to government subsidies for these products (OECD et al. 2013). Inflation has been inferior to 5% since 2008 (Mehler A.; Melber H.; Van Walraven K. 2014).

Apart from transit operations, which represent approximately 80% of its port activity, Djibouti exports little, except cattle to Somalia, the United Arab Emirates and Yemen; food and oil are the main imports (OECD et al. 2013). The country is a net importer and the deficit of its trade balance was an estimated US \$170 million in 2007 (World Bank).

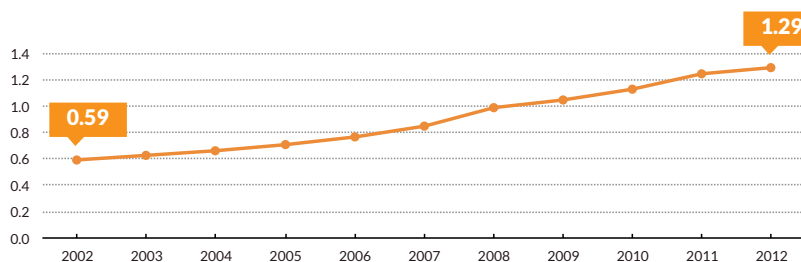
Djibouti is member of COMESA, the Intergovernmental Authority on Development (IGAD), and the Community of Sahel-Saharan States. The economic activity of the country is however little integrated with the rest of Africa and has remained focused on Ethiopia, and more recently, on South Sudan.

The active population in Djibouti was estimated at 300,000 people in 2011 (Mehler A.; Melber H.; Van Walraven K. 2014). The country's workforce is mostly concentrated in the tertiary sector.

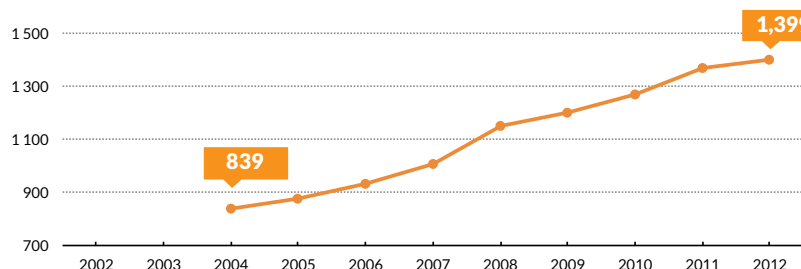
Trends

2014 - Figure 1-5 - Source World Data Bank & African year book - Last ten years

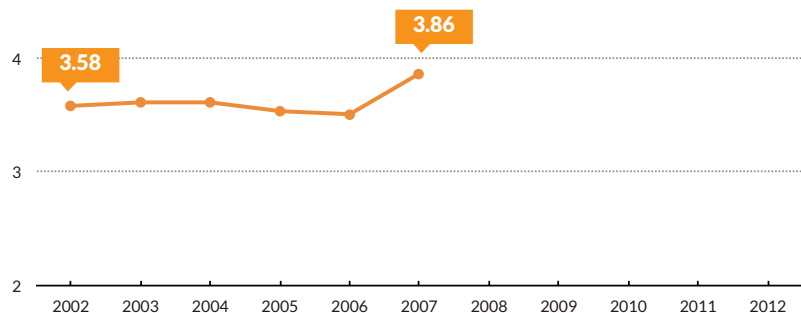
GDP (current billion US \$)



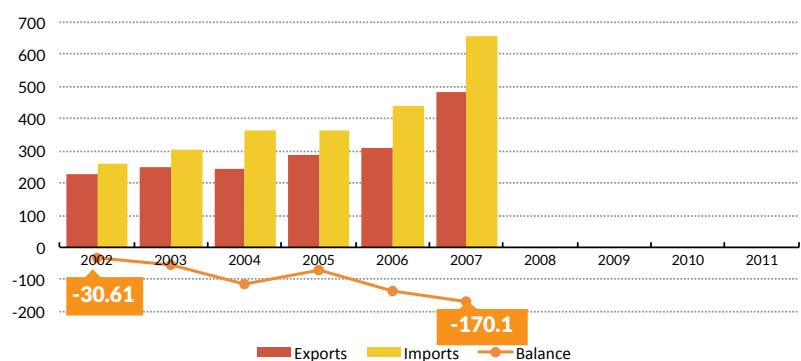
GDP per capita (current US \$)



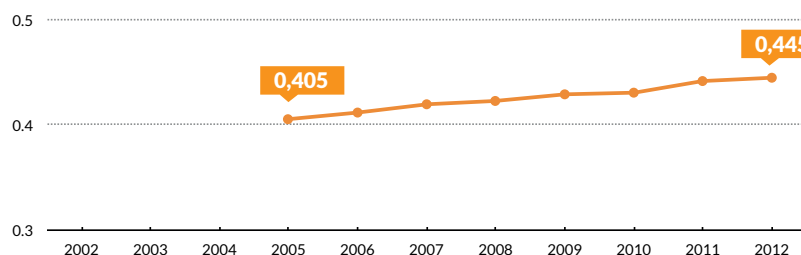
Agriculture % of GDP



Trade balance (current million US \$)



Human Development Index



Poverty has continued to increase over the last decade. The last poverty survey carried out in 2012 showed that almost 80% of people live in relative poverty and 42% in extreme poverty. The poverty survey also showed that almost 48% of the active population was unemployed. The main employer remains the state with 41.3% of the working population in government and public services, followed by individual firms (25.9%), and parastatal and private-public firms employing 12.7% (OECD et al. 2013).

Djibouti's Human Development Index (HDI) puts the country in the 'low human development' category. With an HDI score of 0.445, Djibouti ranked 164th out of 187 countries in 2012.

2. Policy and Planning Framework

2.1. General Framework

The National Initiative for Social Development (INSD) 2011-2015 is the overarching framework to orient development interventions in Djibouti. The purpose of the Initiative is to define the strategy for development and poverty reduction. Since 2007, the Initiative has been articulated around four strategic axes: (i) growth, competitiveness and employment; (ii) access to basic social services; (iii) poverty and vulnerabilities reduction; and (iv) public governance (African Development Bank Group, 2011).

Furthermore, it should be noted that since 2005 Djibouti has been divided in six administrative regions, namely Ali-Sabieh, Arta, Dikhil, Obock, Tadjourah and Djibouti-town.

2.2. Food Security Strategy

Food insecurity appears to be structural in Djibouti, with the country importing about 90% of its food needs. This is the result of unfavourable climatic conditions and underdeveloped agricultural and fishery resources and has been exacerbated by regular droughts (African Development Bank Group, 2011).

Kurien and López Ríos assessed the extent of the integration of fisheries and aquaculture in Djibouti's food security policies and plans by examining, inter alia, two recent documents: the UN Development Assistance Framework (UNDAF) 2013-2017 and the FAO Country Programming Framework (CPF) 2013-2017 (draft version).

The UNDAF states that the lack of fisheries tradition is one of the factors that contributes to the persistence of food insecurity in the country. One of the actions for the transformation of Djibouti is the development of artisanal fisheries, which is included under the domain of food security and rural development, and the axe reduction of poverty and vulnerabilities. Fisheries activities and expected results are included along with the other agricultural sectors, and most of the results are included under the elaboration of policies, programmes and projects for local economic development.

The draft CPF mentions the promotion of fish consumption to improve food security, along with the support of institutional capacity and fish folks' associations under the vision that fisheries are a source of wealth generation, and an overall area of agriculture production inclusive of the transversal elements of gender, climate and environment. Capture fisheries sustainability is included as an expected result of the environmental component of the CPF. The fishery sector is considered an important potential source of economic development, and the priority areas are support to institutional strengthening, management, technological innovation and raising awareness of the importance of fish consumption.

2.3. Fisheries in Public Policies

In general, the policy documents of both government and development partners highlight that the fishery sector has potential to significantly contribute to the economic and social development of the country. It is further indicated that priority actions should focus on the following: a) institutional capacity-building; b) fisheries and aquaculture governance; c) technological innovation; and d) awareness-raising on fish consumption.

It should be stressed that the government is currently drafting a long-term development strategy called Vision 2035, and a study is being done on which leading sectors, including fisheries, could diversify the sources of national growth and create jobs (OECD et al. 2013).

3. Fisheries Resources

The marine waters in Djibouti are located at the junction of the Red Sea and the Gulf of Aden. They are bordered in the north by Eritrean waters, in the southeast by Somaliland waters and in the east by Yemen waters, through the Detroit of Bab-El-Mandeb.

Djibouti's coastal waters extend over a 380 km shoreline and they include a continental shelf (0-200m) of about 2,600 km². Djibouti's marine waters also include three groups of islands, namely Musha and Maskali Islands, the Seven Brothers Islands, and the Haramous Islands. The country claims an Exclusive Economic Zone (EEZ) of about 7,200 km².

The continental shelf is relatively narrow with a width averaging 8 km. It includes mangrove areas covering a surface of about 800 ha and fringing coral reefs extending up to 400 km². The shelf is wider in the south (including an area close to the border with Somaliland) and in the north (Obock), where most fishing activities take place. The shelf is very narrow in the central area (Tadjoura), with a width extending to only 1.5 km in some areas.

Coastal waters are warm and are influenced by the monsoon seasons. During the summer monsoon (June-September), the southern Red Sea waters are subject to year-round upwelling. This upwelling represents the basis of fisheries in the Gulf of Aden and southern Red Sea waters.

On the south coast of Djibouti, close to the border with Somalia, the effects of upwelling of nutrient-rich water begin to be discernible in fish assemblages. They support fewer species and a lower abundance of reef-associated fish than reefs further north. Non-reef species are more productive, however, and this area represents the main artisanal fishing ground in Djibouti (FAO 2004-2015).

It should be noted that a recent fishing agreement between Djibouti and Somaliland (dated 2012) allows Djiboutian fishing fleets to access waters under Somaliland jurisdiction. This zone located in the southern Gulf of Aden is a traditional fishing ground for Djiboutian fishing units, from Loyada in Djibouti at the border with Somaliland to the Lawyo Addo and Zeila areas.

Coastal marine resources are mostly composed of snappers (*Lutjanus spp.*), barracudas (*Sphyraena spp.*), Carangidae (*Carangoides spp.*, *Caranx spp.*), breams (*Lethrinidae* and *Haemulidae*), groupers (*Serranus spp.*), sharks, wahoo (*Scomberomorus spp.*), tuna (*Thunnus spp.*) and lobster. Marine waters also include some stocks of cephalopods (*Sepia spp.*, *Loligo spp.*) and sea cucumbers. It should be noted also that shrimps (*Penaeus monodon*) are caught in Somaliland waters by two small trawlers flying a Djibouti flag.

The last survey on resources in Djibouti waters was conducted by the German Cooperation in 1996 (Künzel T., Darar A. et Vakily J. M., 1996) and was recently up-dated by experts from a project supported by ACP Fish II and executed by COFEPECHE. Estimated annual 'potential commercial

species' is as follows: 1,250 to 2,000 MT for high valued demersal fish (*Balistidae*, *Epinephelinae*, *Lutjanidae*, *Sparidae*, *Haemulidae*, *Lethrinidae*, *Acanthuridae*, *Scaridae*, *Labridae*, *Mullidae*); 5-7,000 MT to 19,600 MT for small and medium pelagics (when including clupeidae species that are not exploited today); 2,000 to 3,200 MT for large pelagics including *Scombridae*, *Carangidae*, *Coryphaenidae*, *Sphyraenidae*, *Xiphiidae*, *Istiophoridae*, etc. (ACP Fish II. 2013).

Due to the narrowness of the continental shelf and its rocky nature, trawling is not allowed in Djiboutian waters and fishing is only allowed for Djiboutian fishing units. The fishery sector in Djibouti waters is only composed of coastal artisanal units which are multi-species and multi-gear (mostly hand lines, hook and lines, trolling lines and, to a less extent, gillnets) fisheries. The domestic fleet also includes two shrimp trawlers which operate in Somaliland waters.

Total fish production in Djibouti marine waters would currently be superior to 2,000 MT per year if fish that is caught in Djibouti waters by both Djiboutian and Yemeni fishers and landed in Yemen illegally (several hundreds of tonnes per year) was included.

Besides marine waters, Djibouti is also endowed with some small inland water bodies. These include some brackish water lakes (Assal, Abbeh) and temporary water bodies called 'oueds' (Essalou, Ouâhayyi, Sadai).

Aquaculture is currently almost non-existent in Djibouti. The government has recently benefited from FAO support to identify a development programme for aquaculture.



KEY INFORMATION AND FIGURES ON THE FISHERY AND AQUACULTURE SECTOR

4. Fishery Sector

4.1. Status of Resources

The last stock assessment survey was carried out in 1996. In the absence of scientific evidence, many indicators would show however, that most of fish stocks are moderately exploited. These include a moderate fishing effort (as expressed by the number of active fishing boats), the use of selective gear (mostly hook and line) and the landing of targeted species of big size. These indicators tend to show that there is a potential room for the further development of fisheries in Djibouti, including targeted demersal species (e.g. Snappers, Groupers, Emperors, etc.) and largely under-exploited small pelagics.

On the other hand, some sensitive stocks such as sea cucumbers would be over-exploited and fishers would observe a decline in the catch rate of some fish stocks in shallow waters (e.g. Snappers and Groupers in depths of 30-50m). It would also appear that the migration of Tuna and tuna-like species would be more irregular and less abundant than before (Hosch, 2010).

Djibouti has recently benefitted from the support of ACP Fish II to strengthen the capacities of the fisheries administration in stock assessment and to improve existing statistical systems with a view to support decision-making in fisheries management. In particular, the purpose of the improved statistical system is to enable the production of satisfactory catch and effort data that can be used to run global models for stock assessment (ACP Fish II, 2013).

4.2. Major Dynamics in the Fishery Sector

Three major categories of stakeholders can be distinguished in the fishery sector in Djibouti. The first refers to 'independent fleets' and involves about 150 individual artisanal fishing units. The second category refers to the Red Sea Fishing company which, in addition to being responsible for the management of the Djibouti fishing port - including the selling of subsidized fuel and ice to fishers - operates a fleet composed of about 15 artisanal fishing units and two trawlers. Red Sea Fishing is also involved in the processing and marketing of a significant share of the fish that is landed in Djibouti port. The third category refers to some fishing units from Somaliland and which are allowed to land and sell fish caught in Somaliland waters in Djibouti port in accordance with the fishing agreement between Djibouti and Somaliland. The Somaliland fleet may currently land 100 MT of fish annually at the Djibouti port.

It should also be noted that a contract with an Algerian firm was signed in 2012 in the fishery sector (OECD et al. 2013). Further information is not available.

Current fish production (landings) in Djibouti is believed to exceed 2,000 MT per year. Red Sea Fishing contributes between 30 and 40 percent of the total.

Artisanal fisheries

According to the fisheries legislation, fishing without a licence is not allowed in Djibouti waters and fishing is reserved to boats registered in Djibouti and to nationals. Moreover, as stated above, only artisanal fisheries can operate in Djibouti waters. There are three categories of licences: category A for motorized boats over 9m; category B for motorized boats under 9m; and category C for foot fishers or fishers using non-motorized vessels. There is also a fourth category of licence that relates to recreational fishing.

The bulk of the artisanal fishing fleet in Djibouti falls under category B and fishing effort is mainly exerted in the southern area from Djibouti port to Somaliland waters. The independent fleet is mostly composed of fiberglass boats below 9m length, which are imported from Yemen and equipped with inboard engines of 40 HP. This fleet regularly operates in Somaliland waters as well as in Djibouti waters. Fishing trips can last up to 3 or 4 days. The artisanal fleet of Red Sea Fishing is composed of boats over 10m in length.

Fishing gears used mostly include hook and lines, hand lines, trolling lines and, to a lesser extent, gillnets. Few fishing units use encircling nets for mullets. One fishing boat from Red Sea Fishing occasionally uses traps. It should be noted that foot fishers can use cast nets.

According to data from the fisheries administration, the fishery sector currently involves 740 fishers of which 65 percent are based in Djibouti town and 24 percent on Obock. The fleet is composed of about 150 active fishing units, out of which approximately 67 percent operate from Djibouti port and 18 percent from the Obock area. It should be noted that Djibouti port is the only place where fishers can access subsidized fuel. For the most part, fishers from Obock go to Yemen to purchase cheap fuel.

Djibouti port is the main fish landing site (between 80 and 90 percent of total fish landings in the country). This can be explained by the fact that Djibouti port offers several facilities and services including subsidized fuel and ice supply, as well as fish processing and storage facilities. The demand for high valued fish is also concentrated in Djibouti town. The bulk of fish landing is composed of high valued fishes including Tuna, Wahoo, Barracuda, King Fish, Snappers and Groupers.

Major trends in recent years have shown a steady increase of the number of fishing boats in Djibouti (about 20 new fishing units per year). The new fleet is mostly composed of fiberglass boats averaging 7m in length and equipped with outboard engines of 40 HP. Boats operating in the Obock area are equipped with outboard engines of 75 HP. More powerful boats (13-15m) equipped with inboard engines are also being introduced. These boats allow for longer and more productive fishing trips. The increase of fishing capacity in Djibouti over the last decade has resulted from a combination of infrastructural development (fishing port in Djibouti port financed by AfDB, fish landing site in Tadjoura and Obock financed by the French Cooperation), increased demand for high valued fish and the arrival of new private investors.

Moreover, the development trend can be explained by the recent signature of a fishing agreement between Djibouti and Somaliland (ACP Fish II, 2013). Access to Somaliland waters for artisanal fishing units requires the issuance of a fishing licence by Somaliland authorities that is renewed every month, in addition to an annual fishing licence delivered by Djiboutian authorities. Recent estimates would indicate that almost 80 percent of fishing boats operating from Djibouti port and all fishing boats operating from Loyada (about 10 fishing units) occasionally access Somaliland waters, particularly in summertime (ACP Fish II, 2013). The production of the independent fleet operating in Somaliland waters may range between 300 and 500 MT per year.

The organization of fishers in Djibouti has remained weak despite the existence of fishers' cooperatives. A significant share of fishers working on Djiboutian fishing units are fishers from Somaliland and Ethiopia. Djiboutian fishers may not exceed 50 percent of the crew members.

Industrial fisheries

Red Sea Fishing is managing two shrimp trawlers (21m and 350 HP, and 24m and 455 HP), which operate in Somaliland waters under the fishing agreement between Djibouti and Somaliland. The vessels are active for approximately 7 months a year (from September to May-June).

The fishing zone of the trawlers is located 5 to 6 nm from the shoreline. Trawling operations usually occur at night. During the day time, vessels use long lines to target Tuna and Tuna-like species.

By-catch from shrimp fishing is used as bait. It is estimated that the annual production of the two trawlers is 15-20 MT of shrimps (*Penaeus monodon*) and 500-550 MT of Tuna and Tuna-like species (ACP Fish II. 2013).

4.3. Fishery Production

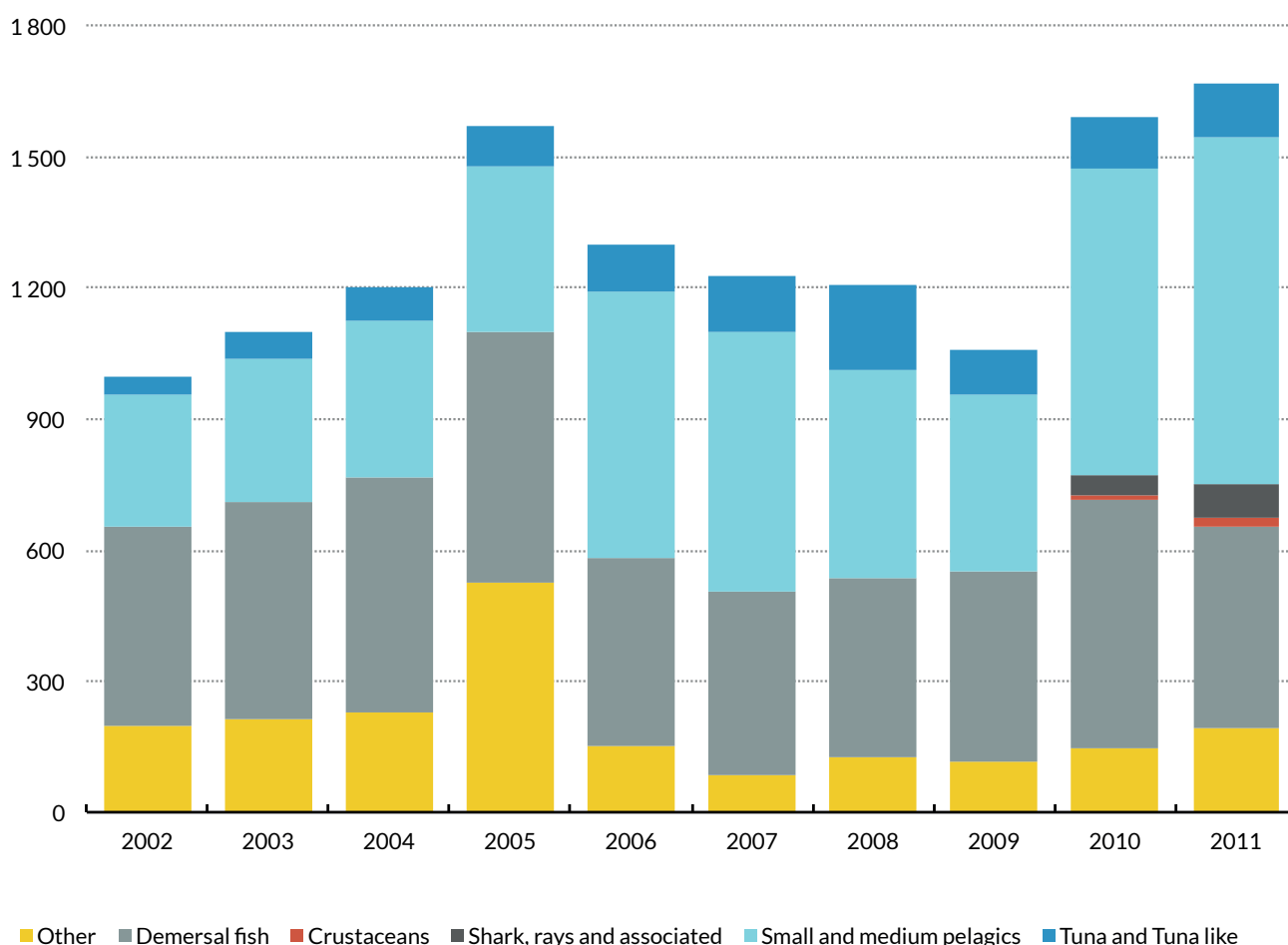
According to FishStat data, domestic fish production in Djibouti has shown a steady increase over the first half of the 2000's reaching a peak of about 1,600 MT in 2005. During the second half of the 2000's a decline of fish production can be observed. Since the end of the 2000's a steady increase of domestic fish production in Djibouti waters has been observed. The fisheries administration refined its statistical system in 2010 with the support of the EU-funded TradeCom project (see section 10). According to the most recent data, fish production in Djibouti now exceeds 2,000 MT per year (with Red Sea Fishing contributing to about 40 percent of the total production).

However, it should be stressed that the term 'fish production' actually corresponds to the fish that is landed in Djibouti. Yet fish landed in Djibouti includes fish caught by Djiboutian fishing units in both Djibouti and Somaliland waters, and fish caught by some Somaliland units in Somaliland waters.

At the same time, a significant share of the artisanal catch is not declared as it is sold on informal

Domestic marine fish production in Djibouti (in tons)

2014 - Figure 6 - Source FAO FISHTAT J (2002-2011)



markets or exported illegally to Yemen. Such production, which may correspond to about one quarter of total catch, is not captured by the statistical system. Furthermore, significant quantities of fish are caught illegally in Djibouti waters, mostly by Yemeni fishers, and landed in Yemen. The quantity of fish that is caught by IUU fishing is believed to represent several hundred metric tonnes per year.

According to on-going research work undertaken in the context of the Sea Around Us Project, total fish production in Djibouti marine waters was approximately 2,600 MT in 2010. For the same year, total fish production data from FishStat was only about 1,600 MT.

The composition of fish landings in Djibouti over the period 2010-2011 indicate that *Caranguidae* species (including King Fish) are the dominant species (21 percent), followed by Bream (15 percent), Barracuda (13 percent), Wahoo (11 percent), Grouper (7 percent), Snappers (7 percent) and Tuna species (7 percent) (ACP Fish II. 2013).

4.4. Fish Utilization

Most of fish is landed at Djibouti port, which is relatively well equipped in terms of fish processing and marketing facilities and which has most of fish demand in the country. In Djibouti town, there are three main marketing networks for fresh fish. The first is Rhyad central market and involves wholesale and retail sellers. Fish is stored in basic insulated boxes such as out-of-order freezers with ice and sanitary conditions are poor in general. The second market place is managed by Red Sea Fishing and involves a network of fish shops. It should be noted that fish is supplied from both independent fishing units and affiliated fishing fleets. The third marketing network consists of direct sales from independent fishers to restaurants.

Fish demand is steadily increasing thanks to attractive fish prices when compared with meat prices, increased demand from the local population and an important demand from members of the foreign armed forces based in Djibouti and involved in the surveillance of the Gulf of Aden and the north-western Indian Ocean (ACP Fish II. 2013).

In general, infrastructures and facilities for fish preservation, including ice-making plants and cool rooms are poor. At the Djibouti port there is an ice-making plant with a capacity of 5 MT per day, which is deemed insufficient. Ice-making plants in Obock and Tadjoura are not in operational anymore and the capacity of the ice-making plant in Loyada is relatively limited.

It should also be noted that Djibouti is not certified to export fish to EU markets (ACP Fish II. 2013). The Direction of Livestock and Veterinary Services (DESV), under the Ministry of Agriculture, Fisheries and Livestock (MAPE) is the Competent Authority for sanitary aspects of the sector. The National Laboratory for Food Analyses (LANA) and the Geochemistry Laboratory of the Djibouti Research Center (CERD) share the responsibilities for the quality control of fish and fishery products.

5. Fish Import and Export

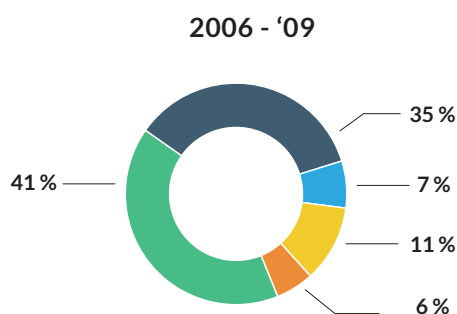
Djibouti is currently by far a net importer of fish and fish products. According to FAO FishStat data, the trend of fish imports in volume and value has seen a dramatic increase since 2004. In 2009, Djibouti imported about 8,000 MT of fish and fish products valued at approximately US \$16.8 million. Imports are mostly composed of dried fish (unspecified species) and large pelagics. Fish exports in 2009 represented 1,370 MT valued at about US \$640,000.

FishStat data would therefore indicate that the foreign trade of fish and fishery products in Djibouti is far from being insignificant.

Further investigation would however be needed to comment on some of these figures, particularly considering that total fish production is only approximately 2,000 MT per year. One explanation could be that Djibouti may import and re-export large quantities of dried fish to neighbouring countries. The FAO Fishery Country Profile of 2004 noted, “there is some small-scale drying and salting of anchovies and sardines, much of which is exported to neighbouring countries”. Another explanation could be that part of the fish exported to Yemini markets (and not accounted in domestic fish production) is accounted for in official figures.

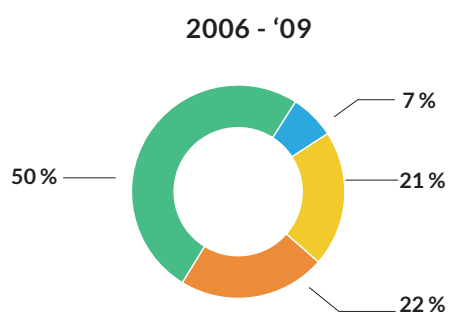
Fish Imports by category in Djibouti in value (% of \$)

2014 - Figure 7 - Source FAO FISHTAT J (2002-2009) - Average period



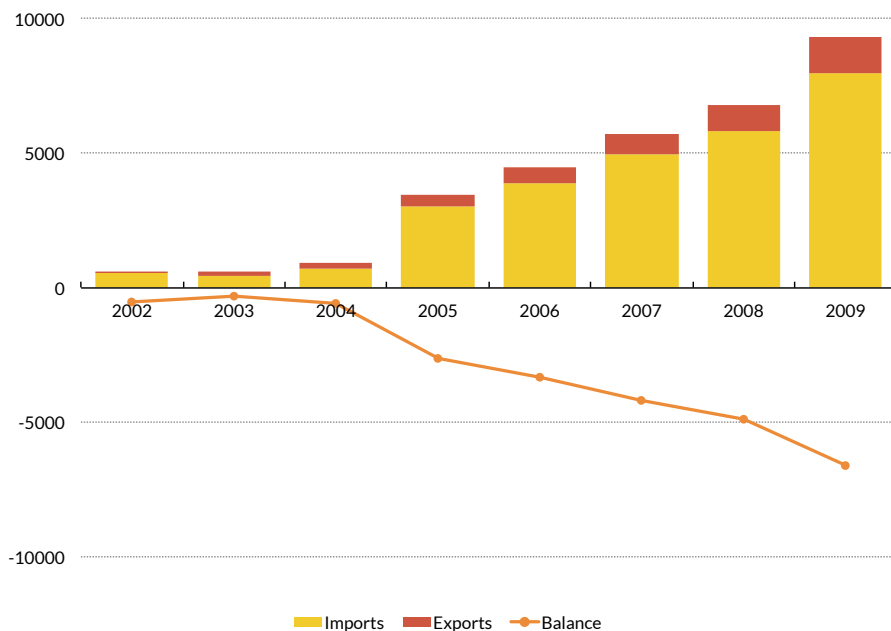
Fish Exports by category in Djibouti in value (% of \$)

2014 - Figure 8 - Source FAO FISHTAT J (2002-2009) - Average period



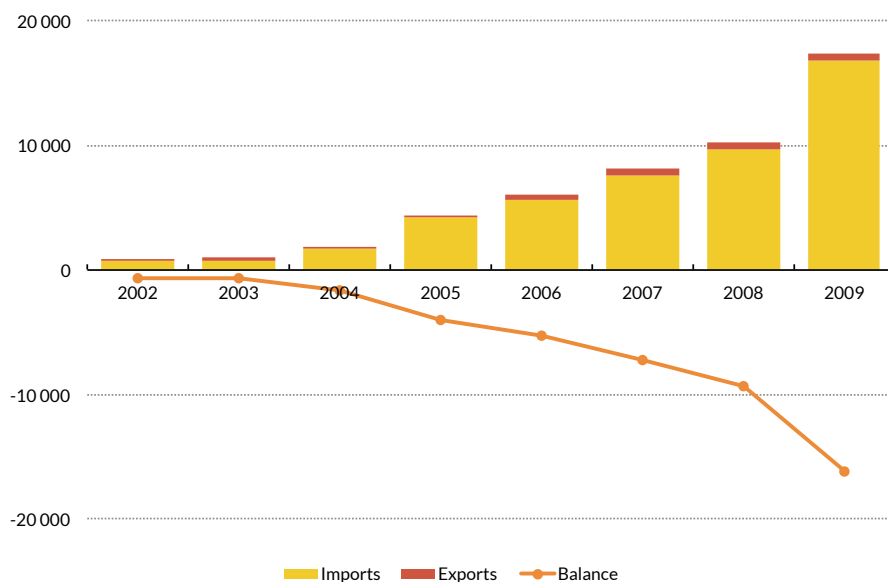
Fish trade balance in Djibouti in volume (in tons)

2014 - Figure 9 - Source FAO FISHTAT J (2002-2009)



Fishtrade balance in Burundi in value (in '000 US \$)

2014 - Figure 10 - Source FAO FISHTAT J (2002-2009)



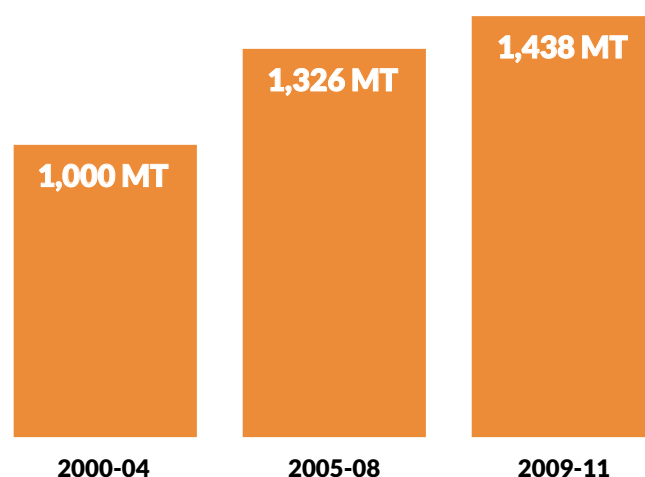
6. Contribution of the Fishery and Aquaculture Sector to the Economy

The fishery (and aquaculture) sector can be considered a marginal sector in terms of the aggregated economic output in Djibouti. The exact contribution of the sector to the **national GDP** and **budget revenue** is however not known. Despite this low contribution at the aggregated level, the fishery sector in Djibouti plays an appreciated role in coastal economies, providing employment, income and food.

According to FAO FishStat data, **total fish production** has varied significantly over the last decade. However, there has been a tangible trend of a steady increase of fish production/landing since 2009 and current fish production is believed to largely exceed 2,000 MT per year.

Total production of fisheries in Djibouti in volume (in tons)

2014 - Figure 11 - Source FAO Fishtat J (2000 -2011)



The low participation of fisheries in economic activity is also reflected in **foreign trade** figures. According to Kurien and Lopez (2013), total exports of fishery products in 2011 accounted for 0.5 percent of total sales to foreign countries and 0.6 percent of exports of food and agriculture. In terms of total imports, fishery products accounted, in the same year, for 0.1 percent and 0.3 percent respectively, if only food and agriculture imports are considered.

Contribution to employment is estimated at about 750 fishers, of which only about half are Djiboutian.

According to FAO estimates, per capita **fish consumption** was estimated at 2.6 kg for 2009, which places the country in the lower end of fish consumers amongst African countries (where the average is 9.4 kg). Djibouti is a net importer, and purchases from foreign countries accounted for 54 percent of the total availability of seafood in 2009. Domestic supply originates entirely from capture fisheries. However, fishery resources are assessed as underexploited, particularly with regards to small pelagics, and this implies that there would be enough fishery resources in Djibouti waters to fulfil current consumption levels (Kurien, John, Lopez Rios Javier. 2013).

The importance of fisheries for **food security** in Djibouti is relatively limited. In 2009, FAO estimated that fishery products account for 11.9 percent of animal protein intake, well below the






African average (19.1 percent). On the other hand, the daily per capita protein intake from fish is continuously growing, and was estimated at 0.6 grams per day in 2009.

Fish seems to play a secondary role in the food security picture in Djibouti. Fishery products account for 4.6 percent of animal protein intake, according to FAO estimates for 2009. This indicates that fish is less important in the diet of Djiboutians than the average of the African population (19.1 percent) and below half of the regional average (11.6 percent) (Kurien, John, Lopez Rios Javier. 2013).

Fish consumption in Djibouti (in live weight)

2014 - Figure 12 - Source FAO Fish and fishery product, world apparent consumption FAO STAT (2000 - 2009)

	 Total fish supply quantity	 Fish supply per capita	 Fish protein per capita
2008 - 09	1,364 MT	1.6 kg/y	0.5 g/day
2004 - 07	1,154 MT	1.43 kg/y	0.4 g/day
2000 - 03	709 MT	0.95 kg/y	0.25 g/day



POLICY, INSTITUTIONAL AND LEGAL FRAMEWORK OF RELEVANCE FOR THE FISHERY SECTOR

7. Fishery Policy and Planning

The overall sectoral policy in Djibouti has been guided by the Fisheries Master Plan elaborated in 2004 with the support of AfDB. This document is relatively outdated considering the changes that have occurred in the fishery sector and recent international development.

The 2004 Master Plan is articulated around five thematic issues, including support for small-scale economic operators, support for potential fish exporters, capacity-building of the fisheries administration, preservation of the environment, and sustainability of productive infrastructures. A five-year action plan addresses the following strategic axes: (i) Enhance the missions and means of the administration; (ii) Improve knowledge of the sector; (iii) Structure the profession; (iv) Develop fish consumption; (v) Increase fish production; (vi) Support the development of value chain for fish export; and (vii) Preserve marine resources and environment.

It should be noted that Djibouti prepared a National Action Plan to fight against Illegal, Unreported and Unregulated (IUU) fishing in 2010 with the support of FAO (ACP Fish II, 2013). This plan focuses on actions aimed at strengthening the Djibouti MCS system and also includes recommendations to be considered in light of revision of the 2004 Master Plan and the Fisheries Act of 2002.

8. Institutional Framework

8.1. Fisheries Administration

The overall responsibility for the fishery and aquaculture sector in Djibouti falls under the Direction of Fisheries of the Ministry of Agriculture, Fisheries and Livestock (MAPE). The Direction of Fisheries is responsible for all issues relating to policy, management and development of the fishery sector including the training of operators.

As mentioned above, the Direction of Livestock and Veterinary Services of the MAPE is responsible for all sanitary aspects of fish and fishery products in Djibouti.

Under the responsibility of the Permanent Secretary of the MAPE, regional sub-directions are responsible for the execution and supervision of actions relating to fisheries and livestock, in close collaboration with central directions of the Ministry and local governments. Regional Assemblies can promote actions for fisheries development and management in line with the national fisheries policy and legislation (ACP Fish II, 2013).

The current institutional system, and particularly the Fisheries Direction at the central level, is faced with weak human capacities as well as a lack of financial and logistical means.

Furthermore, a Fisheries Advisory Council was created by the Fisheries Act of 2002 and its enabling text of 2007. The Council should be regularly consulted by the Minister in charge of fisheries to support decision-making on many aspects relating to fisheries management and development: however, the Council has never met.

8.2. Fisheries Research and Training

There is no specific fisheries research centre in Djibouti. Fisheries research falls under the mission

of the Djibouti Study and Research Center (CERD), under the Ministry in charge of universities and research.

Until now, no fisheries research programme has been conducted at the CERD which explains the lack of knowledge on fishery resources and of scientific capacity to provide advice in support of decision-making in fisheries management. The situation should however improve thanks to the ongoing creation of a laboratory on marine biology within the CERD (ACP Fish II, 2013).

It should also be noted that there is no specific fisheries training centre in Djibouti.

8.3. Other Public Institutions concerned by Fisheries

Several public institutions are involved in fisheries, notably the Direction of Marine Affairs, under the Ministry of Equipment and Transport, which is responsible for the registration of vessels and issues relating to safety at sea, and the National Navy under the Ministry of Defense which participates in fisheries MCS operations.

Other institutions include the Direction of Territorial Management and Environment, under the Ministry in charge of environment, which is responsible for the development of Marine Protected Areas (MPAs). Three MPAs have been established in Djibouti: Musha and Maskhali Islands, Seven Brothers Island and Haramous. In the MPAs, corals are protected and fisheries are strictly regulated and diving is banned.

As mentioned above, other institutions involved in fisheries include the National Laboratory for Food Analyses (LANA) and the Geochemistry Laboratory of the CERD, which are responsible for the quality control of fish and fishery products.

9. Legal Framework

9.1. Fisheries Legislation

The main fisheries legislation in Djibouti is the Fisheries Act of 2002 (*Loi n°187 du 09 septembre 2002 portant Code des Pêches*) and two main enabling texts adopted in 2007, namely the Decree n° 2007-14, which regulates the functioning of a Fisheries Advisory Council, establishes fishing conditions in Djibouti waters, bans industrial and trawl fishing in Djibouti waters and gives precisions on the legal status of fishing vessels, and the Ministerial Decree n° 2007-0036, which defines practical conditions attached to fishing licences including licence fees (*Arrêté n°2007-0036 portant réglementation de l'octroi des licences de pêche*). Other enabling texts have yet to be adopted. These refer to fishing regulations such as minimal size of species, gear specifications, closed seasons, etc. and to the establishment of a Fisheries Development Fund and the creation of Fish Inspectors.

Other legislation of relevance for the management of the fishery sector are the Maritime Zone Act of 1979, which sets out the different limits of Djibouti maritime zones, the territorial sea, contiguous zone as well as the EEZ (*Loi n°52/AN/78 du 9 janvier 1979 portant sur la Mer Territoriale, la Zone Contiguë et la ZEE*), the Marine Affairs Act of 1982, and the new Environment Act (*Loi n°51 portant Code de l'environnement*), which provides the legal instrument to establish and manage MPAs. It should also be noted that a Ministerial Decree, focusing on aquaculture, was adopted in 2007 (*Arrêté n° 2007-35*).

Djibouti has yet to ratify the 1993 FAO Compliance Agreement, the 1995 UN Fish Stocks Agreement and the 2009 FAO Port State Measures (ACP Fish II, 2013). Also, Djibouti is not a member of the Indian Ocean Tuna Commission (IOTC) but has the status of Cooperating Non-Contracting Party since 2014.

The fisheries legal framework has been a major policy instrument towards sustainable fisheries in Djibouti, when referring in particular to the ban of trawling and industrial fishing in Djibouti waters. It is not however in full compliance with commitments and obligations vis-à-vis international law for responsible fisheries including fisheries management, environmental preservation and the fight against IUU fishing.

It should be highlighted that Djibouti is now engaged in a revision of its fisheries legal framework. A Marine Affairs Bill is currently in the final stages of development. Most importantly, a new Fisheries Bill was prepared in 2013 with the support of the ACP Fish II programme and is currently being developed.

The Fisheries Bill is a more detailed and updated instrument than the current law and intends to respond to local, regional and international developments. In particular, the Bill focuses on strengthening existing provisions to improve fisheries management and minimize the risk of IUU fishing in Djibouti waters, in accordance with international law (ACP Fish II, 2013). The Bill also aims to improve other element of fisheries governance including improving the functioning of the Fisheries Advisory Council, the legal status of fishers and redefining the Fisheries Development Fund. The ACP Fish II project also made several recommendations, including the need for Djibouti to ratify the main fisheries international instruments and to become a member of relevant Regional Fisheries Bodies.

9.2. Other Elements in relation to Legal Aspects

Djibouti is a member state of the PERSGA, a Regional Organization for the Conservation of the Environment of the Red Sea and the Gulf of Aden. PERSGA is an intergovernmental body dedicated to the conservation of the coastal and marine environments found in the Red Sea, the Gulf of Aqaba, the Gulf of Suez, the Suez Canal, and the Gulf of Aden surrounding the Socotra Archipelago and nearby waters. PERSGA's member states include Djibouti, Egypt, Jordan, Saudi Arabia, Somalia, Sudan and Yemen. PERSGA has promoted the establishment of a network of MPAs in the Red Sea and the Gulf of Aden.

Djibouti is not a member of the Southwest Indian Ocean Fisheries Commission (SWIOFC).

As mentioned above, in addition to the existence of a Technical Cooperation Agreement in Fisheries between Djibouti and Somali dated 1986, Djibouti signed two bilateral fisheries agreements in 2012 with semi-autonomous regions; one with Somaliland and the other with Puntland. The objectives of these agreements are to enable Djiboutian fishing units to access waters under the jurisdiction of both States and the commercialization of fish and fishery products from both States in Djibouti. The agreement with Somaliland is effective. This is not the case for the agreement with Puntland mainly due to technological limitations faced by Djiboutian fishing units.



FOCUS ON FISHERIES MANAGEMENT AND RELATED ISSUES

10. Administrative Functions

Fleet registration and management

The current fisheries legislation makes provisions for both the fisheries administration and the marine affairs administration to develop collaborative linkages for the registration of fishing vessels and the issuance of fishing licenses. Furthermore, fisheries legislation makes provision for the fisheries administration to establish and manage a fishing fleet registry.

Authorization to fish

The issuance of fishing licences is regulated by the Ministerial Decree of 2007 (*Arrêté n°2007-0036/PR/MAEM du 17 janvier 2007 portant réglementation de l'octroi des licences de pêche*). The fishing licence is attached to the fishing boat (and not to fishers). Fishers are however required to hold a professional fisherman card on-board the boats.

The Fisheries Act of 2002 distinguishes three categories of fishing licences: A (advanced artisanal), B (artisanal) and C (traditional). The Fisheries Act also states that crew members should be 100 percent Djiboutian. The Ministerial Decree shows some inconsistencies with the Fisheries Act since it distinguishes two categories of fishing licences, i.e. professional and non-professional, and authorizes de facto the inclusion of foreign fishers in crew members (ACP Fish II, 2013).

The current licensing system for controlling the access to fisheries in Djibouti waters is not yet fully operational, and only 50 fishing boats (all attached to the Djibouti port) are licensed (ACP Fish II, 2013).

Fisheries Monitoring

Since 2010, the Djibouti Direction of Fisheries operates a fisheries monitoring system based on fish landings that was elaborated in 2009-2010 with the support of the EU-funded TradeCom project. The purpose of the TradeCom project was to focus on commercial capacity building of the country to promote the export of fish and fishery products.

Furthermore, as stated above, Djibouti recently benefitted from the support of ACP Fish II to strengthen the capacities of the fisheries administration in stock assessment and to improve the existing statistical system to support fisheries management. In the context of this project, a SWOT analysis of the current fisheries monitoring system was carried out in 2013 (ACP Fish II, 2013). Major strengths include the simplicity and the robustness of data collection. Major weaknesses include the inadequacy of sampling methods, the lack of capture of certain data relating to fishing effort, the lack of consistency in terms of data entry, processing and validation methods, the absence of procedures for data storage, and a lack of human resources to adequately manage the overall fisheries monitoring system. Major opportunity refers to the on-going process for Djibouti to become a member of IOTC.

The ACP Fish II project identified several actions to improve the current fisheries monitoring system in terms of data collection, entry and processing and made several recommendations to improve data saving and storage using simple procedures (ACP Fish II, 2013).

11. Fisheries Management Systems

The artisanal fisheries in Djibouti are de facto under open access and there are very few technical measures to regulate fishing and related activities. Moreover, it is frequently reported that IUU fishing is relatively well developed due to some weaknesses in the MCS. Considering the current trend in the fishery sector, which is notably characterized by a steady increase of fishing capacity and effort, the government may wish to continue developing efforts towards improving the governance and management system of its fishery sector. Such efforts refer in particular, to the on-going revision of the fisheries legal framework and the strengthening of the fisheries research system.

Furthermore, government initiatives for improved fisheries management include the establishment of MPAs under the supervision of the Ministry in charge of the environment and in collaboration with the Direction of Fisheries.

It should also be noted that the legal framework allows for the possibility for the Direction of Fisheries to promote Fisheries Management Plans (FMPs) in close consultation with socio-professional organizations.

12. Fisheries Control, Surveillance and Enforcement

Fisheries control and surveillance in Djibouti is the responsibility of the Direction of Fisheries. The Fisheries Act makes provision for the deployment of fish inspectors but such provision has yet to be implemented. As a consequence, the Direction of Fisheries is not in a position to adequately fulfill its mandate with regard to fisheries MCS.

Until 2010, the maritime police, under the Ministry of Defense, used to participate in the findings of violations to the Marine Affairs Act and the Fisheries Act. In 2009, the government created a Coast Guard unit by Presidential Decree. The Coast Guards replaced the maritime police and fall under the Ministry of Transport and Equipment. The Coast Guards are responsible for the permanent surveillance of Djibouti marine waters to fight inter alia against illegal trade and IUU fishing. The Coast Guards have been equipped with several patrol vessels with the support of international aid from the United States of America and Japan.

The Ministry of Defense still participates in operations at sea through the Navy.

13. Major Issues relating to IUU Fishing

According to the fisheries legislation, access to fishery resources in Djiboutian waters is only authorized to Djiboutian fishing units (and fishers). However, it is currently reported that there is significant foreign artisanal fishing, mostly by Yemenite fishing units, operating in the northern and southern areas of Djibouti waters. Fish is caught in Djibouti waters and landed in Yemen. According to several sources, including the National Action Plan to Fight Against IUU (FAO, 2010), it was estimated that such illicit foreign fishing could catch between 500 and 800 MT per year.

The situation, in terms of this IUU fishing, has significantly improved thanks to the operationalization of the Coast Guards in 2010. Fishing units are frequently arrested (about 1,500 each year) and about 100 boats have been seized (ACP Fish II, 2013). It is estimated that IUU fishing may have decreased by 80%, particularly in the northern area (Obock), and is now mostly concentrated in the Somaliland waters.

Furthermore, a trawler fishing with an Egyptian flag was arrested during the first half of 2013. This led to the seizure of over 50 MT of fish.

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FISHERIES IN THE ESA-IO REGION: PROFILE AND TRENDS

COUNTRY REVIEW - 2014

DJIBOUTI



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