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## **Gabon: A Guide to Improving the Coastal and Inland Fishery Industries**

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### **Abstract**

Improving the coastal and inland fisheries sectors in Gabon will promote economic growth, economic diversification, job creation, food security, healthier diets amongst the population, educational initiatives, and combat gender bias. However, improvements will require additional investment funding. The country currently depends primarily on profits from the oil industry, but it is looking for ways to diversify into other industries. Gabon is a fish-rich country; however, lack of funding, lack of development strategies and organization, poor infrastructure, lack of trained workers, and high market prices have left the fisheries industry relatively neglected and antiquated. This additional investment funding will foster economic growth and bring profitability to not only the country and its investors, but to Gabonese citizens as well.

**Keywords:** Gabon fisheries, aquaculture, diversification

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## Introduction

Gabon is located in West Central Africa, bounded by the Atlantic Ocean at the Equator, the Republic of the Congo, Cameroon and Equatorial Guinea (Figure 1). The country's major natural resources include petroleum, natural gas, diamonds, niobium, manganese, uranium, gold, timber, iron ore and hydropower (KPMG 2012). El Hadj Omar Bongo Ondimba – one of the longest-serving heads of state in the world – dominated the country's political scene for four decades (1967-2009) following independence from France in 1960.



**Figure 1.** Map of Gabon

**Source.** Central Intelligence Agency: The World Factbook 2013

President Bongo introduced a nominal multiparty system and a new constitution in the early 1990s. Allegations of electoral fraud during local elections in 2002-03 and the presidential elections in 2005, however, exposed the weaknesses of formal political structures in Gabon. Following President Bongo's death in 2009, new elections brought Ali Ben Bongo, son of the former President, to power. Despite constrained political conditions, however, Gabon's small population (estimated at 1.6m in 2013), abundant natural resources, and considerable foreign support have helped make it one of the more prosperous and stable African countries (KPMG 2012).

Gabonese coastal waters are rich in fish, mollusks, and crustaceans. Among those found are bass, barracuda, snapper, Nile perch, and African sea catfish. Despite being a fish-rich country, Gabon still imports fish to meet its own needs, primarily due to fish catch and production falling short of national demand. Because the country currently depends on oil sales, it has neglected promising industries such as this and lacks an organized development strategy. The fisheries industry could boost the economy, creating jobs to combat the high unemployment rate,

providing food to combat poverty, and making the fish industry another key source of income to shift away from oil dependency, and thus attracting investors to help fund it and other development.

In Gabon, the fishing is divided into three (3) categories: (i) industrial fisheries, (ii) maritime fisheries and (iii) inland fisheries. To this is added aquaculture. As shown in Table 1, total catch in 2003 amounted to 44,854 tons. (Organisation des Nations Unies pour l'Alimentation et l'Agriculture 2005). Traditional fishing accounts for two-thirds of total catch. The waters off the Gabonese coast contain large quantities of fish, estimated to be able to support an annual catch of 15,000 tons of tuna and 12,000 tons of sardines. Plans for a cannery, fish-meal factory, and refrigerated storage facilities are underway. By international agreement and Gabonese law, an exclusive economic zone extends 200 miles off the coast, which prohibits any foreign fishing company to fish in this zone without governmental authorization. However, since Gabon has no patrol boats, foreign trawlers (especially French and Spanish) often illegally capture tuna in Gabonese waters (Netherlands-African Business Council 2011).

Improving the coastal and inland fisheries sectors in Gabon will promote economic growth, economic diversification, job creation, food security, healthier diets amongst the population, educational initiatives, and combat gender bias. These improvements require additional investment funding. Gabon is a fish-rich country, but lack of funding, lack of development strategies and organization, poor infrastructure, lack of trained workers, and high market prices have left the fisheries industry relatively neglected and antiquated.

To derive economic benefit from the fishing reserves that the country had been unable to tap due to lack of resources, Gabon signed a five-year fishing treaty with the European Union (EU) on December 3, 1998. This treaty allowed for an annual catch of 9000 tonnes of tuna by a fleet of 75 European large fishing boats within Gabon's 19.2 km limit. In return, Gabon was to receive 178.2 million CFA francs annually or 534 million CFA francs during the protocol's three-year duration. However, Gabonese officials say Gabon will be hard-pressed to verify the amount and makeup of the catch, since neither of its coastal guards have the logistical means necessary to access and intercept suspected boats. The problem is further compounded by the fact that foreign fishing boats in Gabonese waters have an economic advantage over locals. They pay no customs duties or VAT, giving them a competitive edge (Inter Press Service News Agency).

Fish production by aquaculture is limited to tilapia culture, practiced on a small scale around the big towns. The development of this production encounters enormous structural difficulties, including lack of a national marketing channel, which would give way to integrated activities and access to food at prices compatible with the value of the end product. Insufficient skills in hydraulics and techniques of breeding also remain problematic. The largest breeding facility, located in High Ogooué (Sodepal, a subsidiary of Comilog) produced only a few tens of tonnes.

The production of tilapia by aquaculture long remained very marginal. Only in 1994 did the culture of tilapia start again, growing gradually and reaching its peak in 1999-2000, with production estimated at 558 tonnes (Table 1). It has since relapsed to about 120-150 tons per annum currently. Compared to other countries in the area, Gabon has less potential for aquaculture, but even the existing potential has not been exploited to an optimal level. Production contributed an

estimated \$1,329,000 US in 1999 and \$976,300 US in 2000 in GDP, with approximately the same quantity of fish (FAO 2002). The financial value is not strictly correlated with the produced quantity, as it also depends on the selling price (AQUASOL 2013). Processed products, such as smoked fish, salted fish, dried and grilled fish also sold well on the Gabonese market and in the countries of the sub-region (Cameroon, Congo, Equatorial Guinea). Gabonese are among the largest consumers of fish per capita in Africa compared to countries such as Senegal (24 kg), Tunisia (10.1 kg), Mauritania (10 kg) and Morocco (7.5 kg) to name a few. Women play an important role as fish processors and wholesalers (Food and Agriculture Organization of the United Nations 2007).

**Table 1.** Fish Catch from 1997 to 2003

	1997	1998	1999	2000	2001	2002	2003
Industrial fishing	10431	13964	11384	11732	9481	10964	12493
P. marine artisanal	24843	30645	29200	24900	23496	20509	22781
Inland fisheries	9442	9442	10000	10838	8943	9400	9500
Aquaculture	57	57	558	558	102	73	80
<b>Total</b>	44773	54108	51142	48028	42022	40946	44854

**Note.** Units in tonne

**Source.** ADP

## Planning Fishery Expansions

Gabon needs to develop its poor fishing infrastructure – boats, nets, equipment. Its fishing industry will not perform well without proper equipment, as its people will not have competitive access to fish. Investment will help lower prices, produce better quality of fish, and increase jobs. Fishing, for the country, can provide increased food security, combating protein malnutrition in a country where 8.8% of children under the age of five years are underweight. This investment would also help combat overexploitation of resources by external countries.

As the fishing industry involves production, transportation, processing, and distribution, this makes way for job creation. Fish farming increases jobs for women and combats youth unemployment rate. Fisheries can also be an attractive area for educational purposes, especially among youth, including research centers, colleges and universities, and trade skills development.

Export opportunities exist for any excess supply, especially to neighboring countries—Cameroon, Congo, Equatorial Guinea. Funding would allow Gabon to concoct development strategies, beginning with developing and updating fish statistical data and combating illegal fishing through added tracking and patrolling systems.

Aquaculture systems, concentrating on Tilapia production methods, and beginning with the cheapest to construct ponds, would allow tilapia production specialists to stimulate natural productivity more readily. Tanks or raceways imply greater expense to construct, but can increase control of the production processes, as can cages, the least costly method of growing larger tilapia. However, the latter are limited by availability of high quality sites, and they can be

subjected to potentially devastating environmental extremes if not properly accounting for the site selection and operational plans (AQUASOL 2013).

Marketing opportunities include Wholesale-to-Restaurants, and Retail-to local Fish Markets (directly to consumers), with issues in advertising/promotion being resolved by road signs, flyers, and increasing product forms, recipes, pricing schemes, and differentiation by product size, taste, and quality for type of fish. Considerations of culture, social class, target markets, and type of consumers, domestically and in neighboring countries must become part of this marketing planning. Costs of feed, equipment, construction, storage, processing, electricity, water, fish, labor, taxes initially would require financing from external or micro-credit sources, as in other start-ups (Northeastern Regional Aquaculture Center).

## Conclusions and Implications

With government and/or private investment funding, development strategies can promote industry organization, infrastructure improvement, and innovation of better quality and quantity of fish and fish products. In case studies of fish farming and ocean harvesting, we find these improvements would reduce the current high market prices, making products more affordable for the consumers and encouraging increased purchasing actions. Education initiatives, such as training programs for workers, college programs for students, aquaculture and management courses available to the youth in schools, ongoing research projects, and advocacy of healthy eating, can be created.

This industry expansion and enhancement can reduce the unemployment rate and lack of job skills among workers, and thus it will raise health awareness. This can also motivate the creation of small businesses, such as aquaculture suppliers, fish farms, production centers, etc., which will also help trained workers to make use of their skills. This additional investment funding will foster economic growth and bring profitability to not only the country and its investors, but to Gabonese citizens as well.

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