FISHERY COUNTRY PROFILE	Food and Agriculture Organization of the United Nations	FID/CP/BLZ
PROFIL DE LA PÊCHE PAR PAYS	Organisation des Nations Unies pour l'alimentation et l'agriculture	August 2005
RESUMEN INFORMATIVO SOBRE LA PESCA POR PAISES	Organización de las Naciones Unidas para la Agricultura y la Alimentación	

BELIZE

GENERAL GEOGRAPHIC AND ECONOMIC DATA

Area:	22 966 km²
Water area:	46 000 km²
Shelf area:(1)	9 800 km²
Length of continental coastline:	457 km
Population (2003):	256 000
GDP at purchaser's value (year):	$US 986.9
GDP per head (2003):	$US 3611.5
Agricultural GDP (2003):	$US 85.25

Fisheries GDP (2003):including aquaculture	$US 49.05

(1) The shelf area is a complex system consisting of the largest barrier reef in the Atlantic (220 m in length), three offshore atolls- (Lighthouse Reef which contains the Blue Hole, the Turneffe Islands and Glovers Reef), patch reefs, seagrass beds, several hundred cayes of sand and mangrove, extensive mangrove forests, coastal lagoons and estuaries. Total area fished is estimated to be about 4700 km^2 within a depth range of 1.5-10 m2. Source: Caribbean Regional Fisheries Mechanism.
http://www.caricom-fisheries.com/members/belize.asp

FISHERIES DATA

Commodity balance (2003):

	Production	Imports	Exports	Total Supply	Per Caput Supply

	tonnes liveweight				kg/year
Fish for direct human consumption	15 353	1 467	3 195	3 625	14.2
Fish for animal feed and other purposes	10 000*	n.a.	n.a.	n.a.	-

*) fish caught by vessels using flags of convenience

2003 15,353 10,000 1,467 3,195 0 3,625 256 14.2

Estimated Employment (year):	
Primary sector (including aquaculture):	1672
Secondary sector:	123
Gross value of fisheries output (2004):	US$ 53.4 million
Trade (2003): imports:	US$ 2 574 000 7 161 tonnes
exports:	US$ 16 239 000 3 149 tonnes

FISHERY SECTOR STRUCTURE

Overall Fishery Sector

The Fishing Industry contributes significantly to the economy of Belize mostly from exports of lobster, conch, and shrimp. The Fisheries Sub-sector contributed 5% to Belize's Gross Domestic Product (GDP) in 2003 (Environmental Statistics for Belize, 2004). Fisheries export statistics, for the year 2004, reflected earnings valued at Bze $106.8 million with Lobster contributing Bze $15.1 million, Conch Bze $5.2 million and Marine Farmed Shrimp Bze $84.3 million (Belize Fisheries Department, 2004).

The sector is characterized as a commercially artisanal industry except for the industrial trawl fishery of shrimp and employs approximately 1672 active fishermen. The artisanal fishing fleet consist of 552 boats which are composed of open boats, sail sloops and canoes. The industry is considered to be lucrative and successful mainly because of the good prices obtained on the foreign market and because most fishermen belong to one of the four main cooperatives. They play a dominant role in the industry and are entirely owned by local investors and fishermen that are the main shareholders.

The Belize Fishing Industry has been successful because of its ability to adapt to both local and global changes thus allowing it to capitalize on the benefits of certain policies or maintain the

level of operations and activities in the sector necessary for its continued growth. It is envisaged however that the proliferation of more robust policies geared directly or indirectly towards the sector could have profound implications on the integrity and continued success of the fishing industry (Wade et al, 2001).

Practically all the fishing is done in the shallow waters of the barrier reef and the shallow waters of the three atolls. There are nearly 160 miles of barrier reef and 180 miles of reef around the outer atolls. The shallow lagoon between the mainland coast and barrier reef and inside the coral atolls provide ideal habitats for the development of often extensive seagrass beds which provide breeding or feeding areas for numerous commercially valuable species including lobster, conch and many fish species.

Marine Sub-Sector

Catch profile

Most of the fishing effort in Belize is focused on the capture of the Spiny Lobster (*Panulirus argus*) and the Queen Conch (*Strombus gigas*), these represent the largest fisheries within the industry. Lobster landings which peaked at 1,000 MT in 1981, fell to 222 MT in 2000 and in 2004 production was 278 MT. Conch landings have also declined from a peak of 562 MT in 1972 to 235 MT in 2000 and in 2004 production was estimated at 241MT (Belize Fisheries Department,2004).

The targeted finfish species for export include groupers of the genera *Epinephelus* and *Mycteroperca*; snappers of the genera *Lutjanus* and *Ocyurus*; the hogfish (*Lachnolaimus maximus*); the king mackerel (*Scomberomorus cavalla*); the great barracuda (*Syhyraena barracuda*); and jacks of the genera *Alectis*, *Caranx* and *Trachinotus*. In 2004, finfish exports were valued at Bze $5.3 thousand. The Species harvested for local consumption include grunts (Haemulidae), snooks (Centropomidae), mullets (Mugilidae), porgies (Sparidae), triggerfish (Balistidae), and the tarpon (Megalopidae).

There is also a shark fishery that targets various species mainly of the Carcharinidae and Rhincodontidae families, including the bull, blackfin, hammerhead, nurse, reef and lemon sharks. No specific assessment has been conducted to determine the status of the shark fishery; however, the available landings data (of the Fisheries Department) provide evidence of a decline in catches. A small-scale fishery for the stone crab (*Mineppe* sp.) and the blue crab (*Callinectes sapidus*) also exists, but the production obtained from this fishery has not been consistent, hence the activity has not been routinely monitored.

Fishing for shrimp is conducted by both artisanal and industrialized trawl fishers. The industrial shrimp trawl fishery has been an important fishery in Belize over the last six decades. Marine shrimp tails landings reached its peak with over 145 MT in the late 1980s (Carcamo, 2005). Although landings have dropped significantly to approximately 74 MT in 2004 and less trawlers operating, this fishery valued at Bze $948 thousand in 2004 (Belize Fisheries Department, 2004) is still considered significant to the two main cooperatives. Presently there are 4 locally owned trawlers and the others fish through joint venture agreements with the local cooperatives. Pink shrimp (*Penaeus dourarum*) is the principal species captured, but *P. aztecus* and *P. schmitti* also appear occasionally in the nets.

LANDING SITES

More than 50% of licensed fishers are members of an established fishing cooperative in Belize. As a result, 90% of the lobster and conch produced in Belize is landed at one of these cooperatives where it is processed for export. There are five established and functional fishermen cooperatives in Belize.

Fishermen Cooperative	Location	Quantity of Fish landed (2004)
Caribena Fishermen Coop	San Pedro Ambergris Caye Belize District	6.9 MT
Northern Fishermen Coop	Belize City, Belize District Caye Caulker, Belize District Mango Creek, Stann Creek District	316.97 MT
National Fishermen Coop	Belize City, Belize District	311.74
Placencia Fishermen Coop	Placencia Town, Stann Creek District	25.5 MT
Rio Grande Fishermen Coop	Punta Gorda Town, Belize District	2.4 MT

Most independent fishermen primarily target the finfish species and land their products at one of the four main landing sites/markets in the urban areas.

Landing Site / Market	Location
Vernon Street Market	Belize City, Belize District
Corozal Market	Corozal Town, Corozal District
Dangriga Market	Dangriga Town, Stann Creek District
Punta Gorda Market	Punta Gorda Town, Toledo District

Note: A large quantity of catch from independent fishermen is sold directly to large hotels along the coast of Belize. The Fisheries Department is currently restructuring its data collection program to capture the quatities being sold to the hotels.

FISHING PRODUCTION MEANS

The national capture fishing effort has been concentrated in the relatively shallow waters of the reef platform involving approximately 552 registered small (5-10 meters) fishing vessels with outboard engines (15-75 hp) and simple capture methods. The methods include gillnetting, lobster and fish traps, casitas (lobster shades), trolling, hand-line fishing and free diving. The main target species in terms of economic value are spiny lobsters, conch and mainly snappers and groupers. Fishing activities beyond the barrier reef are minimal and restricted to the small fishing settlements associated with the offshore cays or recreational fishing associated with hotel/resorts on selected cayes. The shrimp trawling industry employs an industrial fleet which fluctuates between 3 to 8 trawlers per season and operate primarily in the Victoria and Inner channels of Southern Belize.

MAIN RESOURCES

Fishing activities in Belize have traditionally revolved around the lobster and conch fisheries. Over the last few years shrimp and finfish, both demersal and inshore pelagics, have gained recognition as fisheries of tremendous economic potential. Also, the aquaculture industry have been recognized as one of the fastest growing industries in Belize and over the last five years have surpassed the earnings of lobster and conch which have been Belize's most important fisheries revenue earners.

MANAGEMENT APPLIED TO MAIN FISHERIES

The main policy objective for the Fisheries Sector is to maintain a sustainable yield of the fisheries resources while continuing to contribute to food production, foreign exchange earnings, to optimize future and present benefits and to improve nutritional status in the longer term (National Food & Agriculture Policy, 2003).

Fisheries Department executes this mandate through its main policy objectives which are to:

- Encourage and promote sustainable fish production systems in both sea areas and inland fisheries;
- Diversify production of the underutilized and non traditional fish species in territorial waters so as to reduce pressure on high valued fish;
- Encourage deep sea fishing to take advantage of Belize's resources in its deep sea territorial waters;
- Retain product quality and remain competitive in export markets;
- Increase value added activities in the production system and fish processing;
- Stabilize landings for export markets;
- Maintain maximum economic sustainable yield;
- Improve management of the ecological systems and the marine environment of fish habitats;
- Improve the economic and social well-being of the fishers and their communities.

Presently, the fisheries resources are managed through the enactment of Fisheries Regulations which utilize the principles of closed seasons, closed areas, prohibited methods, females and juvenile protection. Below are the main management measures applied to fisheries in Belize.

Coral

1) It is illegal for any person to take, buy, sell or have in his possession any type of coral.
2) An exception is made in case of black coral (order *ANTIPATHARIA*) which may only be bought, sold or exported with a license from the Fisheries Administrator.

Bone Fish

Albula vulpes

Locally known as MACABI- no person shall buy or sell any Bone Fish.

Shrimp

(*Penaeus* spp)

1) The number of vessels trawling in Belize shall not exceed eight vessels in any given year.
2) Closed Season April 15th - AUGUST 14th, inclusive of any year.

Conch

(*Strombus gigas*)

1) Shell length should exceed 7 inches.
2) Market clean weight should exceed 3 ounces.
3) Closed season is from July 1st -September 30th.

Lobster

(*Panulirus argus*)

1) Minimum carapace length is 3 inches.
2) Minimum tail weight is 4 ounces.
3) Closed season is February 15th-June 14th
4) No person shall take berried females or molting individuals.

Marine Turtles

1) No Person shall buy, sell or have in his possession any articles made of turtle shell.
2) No person may take turtle unless with a license from the Fisheries Administrator (traditional use only).
3) No person should interfere with any turtle nest.

Hicatee

(*Dermatemys mawii*)

1) No person shall have in his possession more than three (3), or transport in/on any vehicle more than five (5), such turtles.
2) No person shall fish for females that are greater than 43 cm (17.2 inches) or smaller than 38 cm (15 .2 inches).
3) Closed season is May 1st- May 31st, inclusive in any year.

General Regulations

- No Lobster fishing in the fore reef.
- no setting of traps or nets on the reef or the fore reef
- SCUBA equipment is prohibited in any type of fishery

Restriction on the setting of nets as follows:

a. One hundred yard from the reef or the fore reef.
b. At river mouths
c. A half mile in any community
d. In a channel
e. Mesh size regulation
f. Prohibit setting nets and traps in spawning areas
g. Prohibit use of poisons and explosives

Marine Reserves

The Belize Fisheries Department has the legal mandate to declare and manage Marine Reserves, which are one category of Marine Protected Areas (MPA′s) in Belize. To date eight marine reserves have been declared by the Fisheries Department. These reserves are located throughout the coastal seas of Belize and include the: Bacalar Chico Marine Reserve, Hol Chan Marine Reserve, Caye Caulker Marine Reserve, Glovers Reef Marine Reserve, South Water Caye Marine Reserve, Gladden Spit & Silk Cayes Marine Reserve (GSSCMR), Sapodilla Cayes Marine Reserve and Port Honduras Marine Reserve (PHMR). The guiding principle behind the declaration and management of Marine Reserves is to ensure, increase and sustain the productive service and integrity of the marine resources for the benefit of all Belizeans of present and future generations.

The major goal of Marine Reserves is to conserve marine biodiversity by protecting important ecosystem, habitats, and species. This is realized through the implementation of the following activities:

- Implementing and supporting marine scientific research by providing a natural laboratory;
- Enhancing capacity building through education, public awareness and collaboration;
- Mobilizing financial and technical resources for the institutions concerned.

These objectives are realized through the following management actions:

- providing a refuge from harvesting activities;
- protecting habitats, especially those critical to lifecycle stages such as spawning, juvenile rearing and feeding;
- protecting spawning stock biomass, thus enhancing reproductive capacity;
- protective areas of species, habitats, and ecosystems restoration and recovery;
- enhancing local and regional fish stocks through increase recruitment and spill over of adults and juveniles into adjacent areas;
- assisting in conservation-based fisheries management regimes;
- providing opportunities for scientific research.

FISHERMEN COMMUNITIES/SOCIO-ECONOMIC IMPORTANCE

The fishing industry of Belize provides direct employment for 1,672 licensed fishermen (2004): More than 50% of these fishermen are between the ages of 15 and 35 years and most of these fishers originate from impoverished rural and coastal communities. Also, the fishermen cooperatives employ 123 fulltime employees and the aquaculture farms employ 1,059 employees (853 full time, 206 part time) who are responsible for processing, packaging and administrating the daily activities.

In most coastal and rural communities, young Belizeans have encountered reduced opportunities in recent times to pursue further education. Most of the fishers and plant workers are only equipped with a primary school education. In some instances, youngsters are removed from school to fish commercially with their fathers and brothers to supplement the family income (Belize National Conch Report, 2005).

The erosion of the traditional preferential markets for Belize's sugar in the European Union and in the United States of America coupled with the market low prices have forced many young sugarcane farmers in northern Belize to abandon their sugarcane fields and enter the fishing industry. Over the next 3 - 5 years, more sugarcane farmers are expected to enter the industry and thus increase the total number of active fishers significantly. There are five fishermen cooperative and fifteen aquaculture establishments operating in the country.

INLAND SUB-SECTOR

The freshwater capture fishery is the least documented in Belize. A few cichlids species are known to be targeted in rivers and lagoons; this includes the Baysnook (*Petenia splendida*), the Crana (*Cichlosomas urophthalmus*) and the Tilapia (*Oreochromis niloticus*). The tarpon (*M. atlanticus*), two species of catfish (*Ictalurus furcatus* and *Ictalurus* sp.) and the freshwater

turtle or hicatee (*Dermatemys mawii*) are also species of importance in the freshwater fishery. Freshwater fishery is generally practised at a subsistence level, but there is evidence suggesting that cichlids and catfish are sometimes sold in inland communities. The primary gears utilized by inland fishermen are hand lines and gill nets. The general fisheries legislation applies to all inland fishing activities in country.

RECREATIONAL SUB-SECTOR

The most current data on the recreational or sport fishery are those reported for the 'Port Honduras Marine Reserve'. The targeted species in this fishery include the Bonefish (*Albula vulpes*), the Common Snook (*Centropomus undecimalis*), the Permit (*Trachinotus falcatus*) and the Tarpon (*Megalopus atlanticus*). A study carried out in the gulf of Honduras area revealed that the availability of sport fishing species has been on the decline due to destructive fishing activities, such as indiscriminate killings by gillnets. Also because these species are targeted for sale to local consumers and the tourism sector (Voice of the Fishermen of Southern Belize, 2000).

AQUACULTURE SUB-SECTOR

The aquaculture sector in Belize has developed into a multi-million dollar industry over the last two-and-a-half decades. The industry is primarily based on the production of the Pacific White Shrimp (*Litopenaeus vannamei*). The growth performance of this aspect of the sector is reflected in the increase in export production and revenues from 189 thousand pounds and Bz $1.8 million respectively in 1990 (The Status of Aquaculture in Belize, 2002) to 15.9 million pounds and Bz $91.8 million respectively in 2003 (Fisheries Department Statistical Report, 2003). In 2004, the production reached 24.3 million pounds (11 042 t).

In 2004, the volume of exported shrimp continued to increase in a significant way. Total farmed shrimp exports were 16.86 million pounds valued at Bz $84.28 million (C.S.O. Statistical Report), with an increase in export volume of 5.6%. For this time period however, there was a decline of 8.2% in export value when compared to the 2003 scenario. The downward trend in export value has been as a result of a continued decline in global shrimp prices since 2000 due to increased volumes of shrimp by the Asian countries, at very low and competitive prices.

In regards to the area devoted to shrimp farming in 2004, there were 6 888 acres under production with fourteen farms in operation. This represents a 12.5% of the overall area under the tenureship of shrimp farmers (Fisheries Department Annual Report, 2004).

Apart from shrimp mariculture, the commercial farming of *Tilapia* has emerged after early failures by Cherax Belize Limited in 1997. Fresh Catch Belize Limited, the only commercial-oriented tilapia fish farming operation was formally inaugurated in December 2002. The facility has developed 36 production ponds each with an area of 7,000 M^2 (0.7 Ha). Phase I of the project is to develop a total of 150 acres of production ponds, with production targets of 4 000 MT per annum.

In 2004, production of Tilapia from fresh catch was 850 000 pounds (385 t). Since May 2004, tilapia exports from Belize have been exclusively to the U.S. market. In 2004, tilapia fillet exports were 215 880 pounds valued at Bz $1.1 million (Fisheries Department, 2004).

In relation to small-scale fish farming, there are currently over fifteen acres of small-scale fish farming operations involved in the husbandry of a number of native finfish cichlids, such as the Bay Snook (*Petenia splendida*), the Crana (*Cichlasoma uropthalmus*) and the Tuba (*Cichlasoma synspilum*), as well as the introduced or exotic Nile Tilapia (*Oreochromis niloticus*).

Farmed shrimp production in Belize is expected to remain fairly stable for the next two years. Shrimp farmers have been hesitant to continue farm expansion over the past years and are examining options that would ostensibly allow them to survive the current crisis. While improvements in shrimp farming technology are expected to gradually lower production costs, with strong price declines such as those experienced in the past years, farmers are in the process of reducing operational costs at the farm level and improving on production per unit area over time. Any improvements in export prices will depend mainly on the performance of Belizean farmed shrimp in EU markets.

POST HARVEST USE

There are currently 4 processing plants in operation in Belize. Six have been certified for exports to the United States and CARICOM by the Belize Agricultural Health Authority (BAHA) and four have been certified by BAHA for exports to the United States, CARICOM and the European Union. Two Fishermen Cooperatives have been certified only for exportation to the United States and CARICOM by meeting the requirements of HACCP. The main products, lobster, conch and fish are exported with very little processing and no additional processing into secondary products is practiced. They are usually exported as frozen products.

In 2003, three processing plants for shrimp aquaculture were in operation in Belize with a combined processing capacity of 59MT of heads-on shrimp per day (The Status of Aquaculture in Belize, 2002). In 2004, an additional facility was in operation with a daily processing capacity of 27MT of heads-on shrimp (Fisheries Department 2005). These facilities are certified by BAHA for exportation to the United States, CARICOM and the European Union. Shrimp is exported primarily as frozen tails.

FISHERY SECTOR PERFORMANCE

Economic Role of Fisheries

The Fisheries Sector continues to play an important role in the Belize National Economy. Fishery Products was the third largest foreign exchange earner for the country of Belize and contributed 5% to the Gross Domestic Product of Belize in 2003. This sector maintains a constant level of employment and in the case of the aquaculture sub sector, employment has been increasing with its further expansion to accommodate new facilities and the post harvest needs of the industry. Presently the fishing industry employs 1,672 fishermen directly and in most cases these individuals are the sole breadwinners of their families. Also, 976 individuals are employed full time and 206 part time in the processing and the general operations and administration of the fisheries and aquaculture sub sectors.

Demand and Supply

Ninety percent of the Lobster, Conch and Farmed Shrimp produced in Belize are sold directly to foreign export markets. The other ten percent is sold on the local market to consumers and the tourism sector. Most of the finfish landed is also sold locally and consumed by Belizeans and tourist visitors to Belize. Fish and chicken are the main source of animal protein in most coastal and rural communities (Pantin *et al.*, 2003).

The Tourism sector is the largest contributor to Belize's national economy and is also the fastest growing sector in Belize. In 2003, for the first time, one million plus tourists arrived in Belize. This boom in the tourism sector have increased the local demand for seafood and with its projected increase for the upcoming years, the demand for seafood is expected to further increase. The local supply of seafood has had to be supplemented by imports and the demand for imported seafood is increasing on a yearly basis.

Fish Markets and Trade

There are currently two fishermen cooperatives and four aquaculture farms certified to export

Belizean fisheries and aquaculture products. Belize enjoys duty−free access for all exports to the U.S.A. market under the Caribbean Basin Initiative (CBI). In 2002 the lobster fishery earned over $6.6 million US and $211.2 thousand US in foreign exchange on 200,282 kg (200 MT) and 28,375 kg (28 MT) of processed lobster tails and head meat exported to the U.S.A., respectively. Presently the success and importance of the lobster fishery can be attributed to the demand and lucrative average price of $ 30.00 US per kilogram for lobster tail on the international markets. The main export market destinations for Belizean fishery products are the United States of America, Mexico, Guatemala, The European Union and CARICOM Countries. An estimated 94% of HS Code 0306 Crustaceans were exported to the USA during the 1998 − 2000 period; 95% of HS Code 0302 Fresh Fish to CARICOM (Jamaica); 82% of HS Code 0303 Frozen fish also to CARICOM and 90% HS Code 0306 Dried salted fish to Latin America.

Food Security and Rural Development

Fishing has traditionally been a means of subsistence in coastal communities and has been the main source of protein. However it has been transform as a commercial activity over the years and as a result has affected the availability of fish as an inexpensive source of animal protein. Community members in one of Belize's traditional fishing villages have estimated that it cost approximately $30 Bze a day to maintain basic nutrition in a household of six. Consequently, most families unable to raise this amount have been force to maintain a diet lacking in protein (Pantin *et al*., 2003)

FISHERY DEVELOPMENT SECTOR

Constraints

The Belize Fishery sector have remained a strong contributor to the Belizean economy and to the communities who directly engage in it, however it has been forced to now develop and compete in a more challenging global environment. Today the existence of high international trade standards has forced local producers and processors to incur expenses to accommodate the necessary changes in their current activities and facilities. Limitation in funding and material resources and the lack of amendable credit have been one of the major constraints of the industry in their effort to become more competitive. As a result, local institutions have found it harder to cope with non-tariff barriers associated with globalization.

Also, the institutions charged with the management of the resources have been experiencing a deficit in train man power to define and implement the necessary management program to ensure the sustainability of the resources. Belize still has an open access fishery and as a result of increases in market prices for seafood, the resources have been sustaining an increased level of exploitation. As a consequence of the rise in market prices, there has been a decrease in the quantity of fish available to the local markets for local consumption.

Development Prospects/Strategies

The current global economic environment with more competitive markets and the erosion of preferential markets for traditional crops have created great potential for future development in the fisheries sector. The Ministry of Agriculture and Fisheries have recognized this potential for future development and have recognized the need for greater emphasis on systems to ensure sustainable fisheries and aquaculture developments. Also the Ministry have identified the development of new and value-added products for the export markets. The need to access new markets other than the traditional markets of the European Union and the United States is essential to ensure the continued profitability of the industry. Mexico, Japan and Latin America are markets with great opportunities for Belizean products and regional cooperation in trade and technology has to be further established and strengthened. Finally, diversification and

institutional strengthening of fisher organizations through education, research, financing and marketing is also necessary to guarantee the proper stewardship and success of the industry.

Research

The Belize Fisheries Department permits and monitors all fisheries related research in Belize carried out by local and foreign researchers and institutions. The Department is the primary institution which carries out annual fisheries research and data collection on the main fisheries species in Belize. Belize also participates in the research and monitoring activities of the Caribbean Regional Fisheries Mechanism and other regional programs such as those under the Mesoamerican Barrier Reef Systems Project.

Information on sector development, management systems and the socio-economic aspects of the industry is also collected by the Belize Fisheries Department and other collaborating institutions.

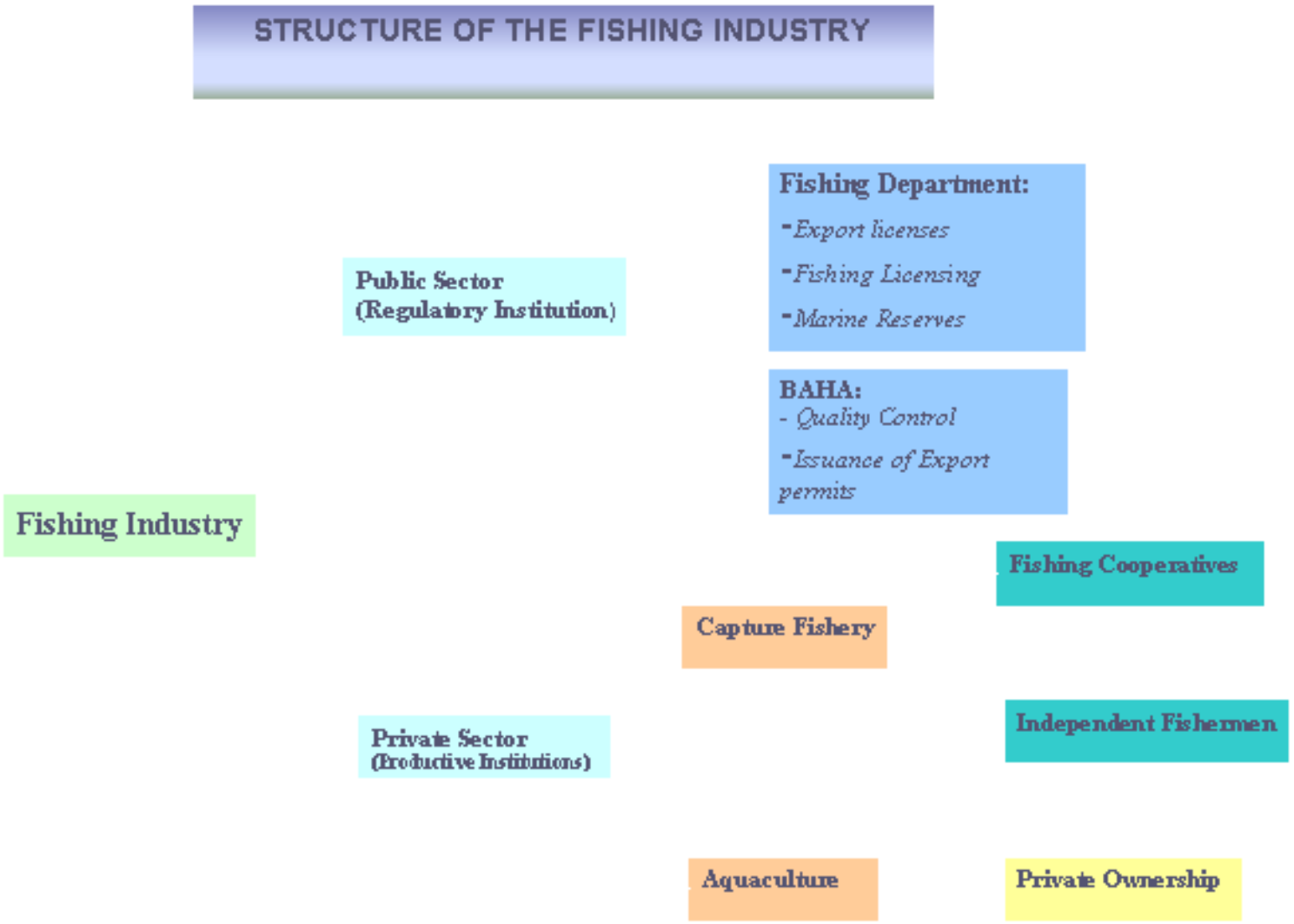
Foreign Aid

Foreign Aid to the fisheries sector in Belize have targeted improvements in infrastructure to support management and research primarily from the Global Environmental Facility through national and regional projects such as the Conservation and Sustainable Use of the Belize Barrier Complex Project and the Mesoamerican Barrier Reef Systems project. Aid from countries such as Japan, Spain , the people's Republic of China and the EU have also benefited Belize through the Caribbean Regional Fisheries Mechanism and other regional initiatives such as the Organization for Aquaculture and Fisheries Management and Development in central America (OSPESCA).

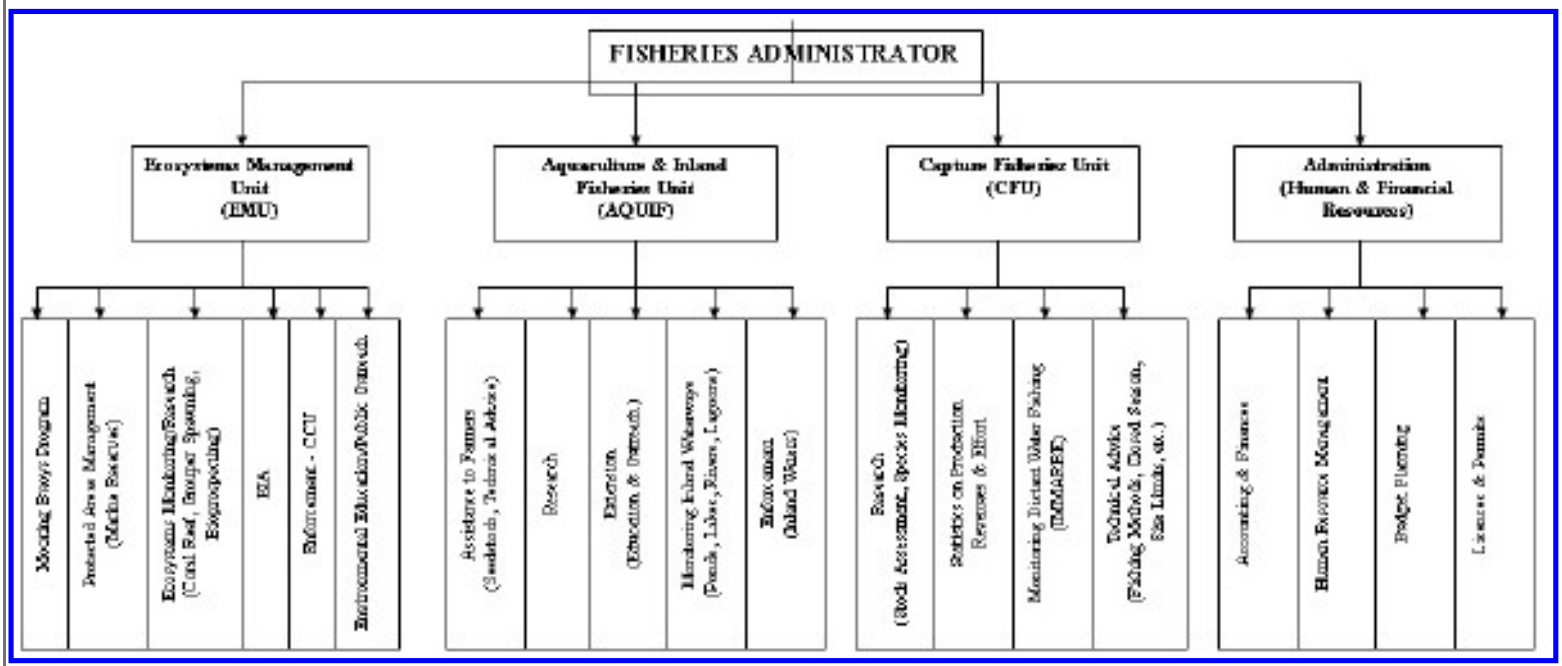
FISHERY SECTOR INSTITUTIONS

The Belize Fisheries Department (B.F.D) is a Department under the Ministry of Agriculture and Fisheries of the Government of Belize. The BFD was established on January 1st, 1965 and was mandated to sustainably manage and develop the Fishing Sector of Belize, through the Fisheries Act of 1948 and its amendment regulations and subsidiary legislation (UNDP, 1996). The Department's mission is *"To provide the country and the people of Belize with the best possible management of aquatic and fisheries resources with a view to optimize the present and future benefits through efficient and sustainable management".*

The Fisheries Administrator is the principal officer heading the Belize Fisheries Department. The Fisheries Administrator is assisted by four (4) Unit Coordinators that are responsible for the planning, programming and execution of work programs of the BFD. The three main program areas of the Department include the Aquaculture & Inland Fisheries (AQUIF), Ecosystem Management (EMU) and the Capture Fisheries (CFU).



Organogram of the Fisheries Department
(Current Structure)



GENERAL LEGAL FRAMEWORKS

The laws governing the fisheries sector in Belize dates back to September 24, 1948. Through

subsequent amendments, the Fisheries Ordinance, Chapter 133 of the laws of Belize, 1948 was consolidated into the Fisheries Ordinance, Chapter 174 of the laws of Belize, 1980. Since then, further amendments have led to the current Fisheries Ordinance, Chapter 210 of the laws of Belize, Revised Edition 2000. Complimentary to the Fisheries Ordinance is the Fisheries Regulations, 1977 that has undergone several amendments with the most recent being the Fisheries Regulations of 2004.

The Legislation that impacts directly on the Belizean Fishing Industry is as follows:

- The main legislation for the fishing industry is the High Seas Fishing Act, Cap. 210:10, 2003 and,
- The Fisheries Act, Cap. 210, 2000.
- BAHA regulates animal health issues as stated under the Meat and Livestock Act.

The Fisheries Act requires that artisanal fishers and fishing vessels are licensed annually in order to fish for commercial purposes. Further, export of fishery products is reserved for established fishing cooperatives. The High Seas fishery is regulated by the High Seas Fishing Act and requires vessels to be registered with IMMARBE. Licenses are conditional upon fishing area, type of fish to be caught, and the period of the year. All licenses are provided by the Belize Fisheries Department upon recommendation from the Director General and the Senior Deputy Registrar of IMMARBE.

Bibliography

Belize Fisheries Department. 2002. The Status of Aquaculture in Belize 2002.

Belize Fisheries Department. 2004. Belize Fisheries Statistics 2003.

Belize Fisheries Department. 2005. Belize Fisheries Department Annual Report 2004.

Carcamo R. 2005. Status Report of the Shrimp Stock at Victoria Channel. Belize Fisheries Department, Ministry of Agriculture and Fisheries.

Caribbean Regional Fisheries Mechanism
http://www.caricom-fisheries.com/members/belize.asp

Central Statistical Office, Ministry of National Development, Belize. 2004. Environmental Statistics for Belize 2004.

FAO. 2004. Yearbook of Fishery Statistics, Summary Tables: Commodities-2003

Heyman, W. and R. Graham. 2000. The Voice of the Fishermen of Southern Belize. Toledo Institute for Development and Envorinment.

Ministry of Agriculture and Fisheries, Government of Belize. 2003. The National Food and Agriculture Policy (2002-2020).

Pantin, D., D. Brown, M. Mycoo, C. Toppin-Allahar, J. Gobin, W. Rennie and J. Hancock. 2003. People and the Caribbean Coast. Sustainable Economic Development Unit, UWI.

Wade, B. A. and Ariola, E.A. November 2001. A Perspective on the Implications of USA Fisheries Policies on the Belize Fishing Industry. 54th Proceedings of the Gulf and Caribbean Fisheries Institute, Provodenciales, Turks and Caicos.

Wade, B.A. May 2002. The Implementation of the Caribbean Fisheries Agenda on Globalisation in Belize. FAO TCP/RLA/0174. Regional Special Programme for Food Security- Formulation Assistance on Trade Facilitation.