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OTAHEITE Fish Landing Site

The Otaheite fish landing site is situated in the southwest of Trinidad. It is immediately west of the Godineau River and the Oropouche Swamp. The landing site itself is located at the end of Otaheite Bay Road. The facilities are used by small scale fishermen living in Otaheite Village and the wider south Oropouche area.



This landing site was refurbished in October, 2011 and the facilities consist of a slipway, a boat repair shed, storage facilities for fishing gear and a wholesale and retail fish market. Otaheite Bay is extremely shallow and this limits the access of fishing vessels onto the shore, especially during low tides. To avoid grounding small flat bottom boats called dories, are used by fishermen to bring their catch to shore.

The retail market operates between the hours of 9:00am and 6:30pm. The wholesale market is generally dependent on the operation of the boats and is mainly active during the times when the catch is landed, which is generally from 11:00am – 6:30pm.



Vessel repair shed

Vessels based at this site are mainly artisanal trawlers, but there are some vessels at the site that practice line fishing. Artisanal trawlers operate in inshore areas of the Gulf of Paria. Trawling for shrimp occurs year round but shrimp catches are more abundant during December – June. Commercial species landed at this site include shrimp (mainly honey shrimp), carite, kingfish, sea trout ('salmon') and brochet (snook).

Number of fishing vessels (2003)	36
Number of fishing vessels (2010)	50
Estimated annual landings (2009)	193,429 kg
Estimated ex-vessel value of landings (2009)	TT$3,796,262

Source: Fisheries Division, Ministry of Food Production

Seafood Safety Tips

- ✓ When purchasing frozen seafood, ensure that there are no signs of frost or ice particles inside the package. The presence of ice crystals or frost indicate abusive storage conditions, for example, seafood has either been stored for a long period of time or thawed and refrozen, therefore compromising quality.
- ✓ Wash hands thoroughly before and after handling raw seafood. Contact surfaces such as counter tops, cutting boards and utensils must be thoroughly cleaned before and after use. Also sanitise with a bleach solution (1 tbsp per gall of water). Counter tops, cutting boards and utensils should not be used for other foods until properly cleaned and sanitized. This prevents cross contamination.
- ✓ Carry a cooler or insulated bag with ice to store your seafood after purchase. This ensures that the cold chain is maintained and product quality and safety is not compromised.

Description of Market Forms

The market form refers to the form or manner in which the seafood is sold. The following are some market forms in which fish are sold:



STEAKS: Cross-sectional slices of the body cut at right angles across the back-bone. Slices are approximately 20mm thick and are also called cutlets. Approximately 84% of the steak is edible. It is suitable for grilling, frying and baking. The recommended portion per serving varies from 151-227 grams (1/3 -1/2 lb).



LOINS: Obtained from large streamlined species such as swordfish, wahoo and tuna. Unlike steaks loins have no bones or waste and are derived by cutting lengthwise along the backbone. Loins can be further processed into steaks, sticks or chunks.



FILLET: Lateral portions from the fish cut lengthwise (lateral portions) along the backbone. Fillets are practically boneless. There is little or no waste and 99% of the fillet is edible. Serving portions are the same as for steaks. Can be utilized for recipes requiring poaching, baking and sautéing. They may be in the form of:

- QUARTER FILLETS: Obtained from very broad fishes such as paoua and mawan. The width of these species provides two fillets per side.
- SINGLE FILLETS: Obtained from broad fish such as snapper and croaker.
- DOUBLE/BUTTERFLY FILLETS: Obtained from narrow fish such as sea trout, bechine and flying fish. The two fillets are joined at the belly.



The SIDC currently has a special promotion of its cookbook "CARIBBEAN SEAFOOD EXTRAVAGANZA" and cooler bag. The cost of the cookbook and cooler bag is $35.00 and $65.00 respectively.

Promotion is available only at the office of the SIDC, located at #6 Bejucal Extension 1, Uriah Butler Highway, Charlieville.
For further information contact us at 665-0751 or 672-3427.

Mullet



Mullet is locally known as white mullet or lebranche and internationally traded as white mullet, mullet blanc and lisa crida.

Mullet is a thick bodied, torpedo shaped fish which is rounder in the front and slightly compressed towards the tail, with bluish tints on its back and a silvery belly. Mullet is distinguished by the presence of two separate dorsal fins, a small triangular mouth and the absence of a lateral line organ.

Adults are generally found in coastal waters including bays, lagoons, salt marshes, mangrove swamps, and tidal rivers. The average life span of mullet is about 19 years with adults reaching a maximum of 355-360mm length. They feed primarily on living and dead vegetable matter and are ecologically important as primary consumers in the food chains of coastal and estuarine waters.

According to data collected by the Fisheries Division, mullet is landed at Claxton Bay, Brickfield, Erin, Orange Valley and Port of Spain. The main fishing gear used are fillet nets, monofilament nets and trawl nets.

The storage life for mullet on ice is 12 to 19 days. It is marketed locally as a fresh whole or gutted/drawn fish and is also exported chilled or salted. Recommended market forms are drawn/gutted, pan dressed, steaks and fillets. The edible yield from the gutted fish is approximately 50%.

The fish should be gutted as soon as it is harvested in order to ensure the best quality and avoid the possibility of parasites from the gut migrating into the flesh. Consumption of raw meat should be avoided and thorough cooking is recommended before consumption.

The flesh of mullet is low in oil, high in protein, firm textured, medium dense and pinkish white in colour and has a characteristic nutty flavor.

Recommended cooking methods are broiling and baking.

Source: Caribbean Seafood Extravaganza;
http://www.sms.si.edu/irlspec/Mugil_curema.htm

State of the World Fisheries and Aquaculture Report

FAO's latest publication on the state of world fisheries and aquaculture highlights the sector's vital contribution to the world's well-being and prosperity.

The report states that fish and fishery products are the most traded food commodities worldwide, resuming its upward trend following a decline in 2009. It is one of the most important animal producing sectors, and in the last five years the average world food fish supply has grown dramatically.

The increase in world trade was driven by sustained demand, trade liberalisation policies, globalisation of food systems and technological innovations. Global trade of aquatic food reached a record US$109 billion in 2010 and was estimated to reach a record of US$125 billion in 2011.

The report revealed that the sector supplied the world with 148 million tonnes of fish in 2010 of which 128 million tonnes were destined for human consumption. This provided more than 4.3 billion people with about 15% of their animal protein intake. Preliminary data for 2011 indicates an increased production to 154 million tonnes of which 131 million tonnes was utilised for food.

Production from global capture fisheries continued to remain stable at about 90 million tonnes although there have been some market changes in catch trends by country, fishing areas and species. The growth of the aquaculture sector on the other hand continued. In 2010, the global production of farmed food fish was in the vicinity of 59.9 million tonnes, which was utilised almost entirely for human consumption.

Also in 2010, the fisheries and aquaculture sector provided livelihoods and income for the estimated 54.8 million people who were engaged in primary fish production, of which an estimated 7 million were occasional fishers and fish farmers. Latin America and the Caribbean accounted for 3.6% of the world total of people engaged as fishers and farmers.

The report also found that a sizeable share of fish consumed in developed countries consists of imports due to steady consumer demand and declining domestic fishery production. Their dependence on imports in particular from developing countries, is projected to grow in coming years.

World imports of fish and fish products set a new record at US$111.8 billion in 2010, up to 12 percent on the previous year and up 86% from 2000. Preliminary data for 2011 pointed to a growth rate of 15%.

The United States of America and Japan are the major importers of fish and fishery products and are highly dependent on imports for about 60% and 54% respectively of their seafood requirements.

The European Union is by far the largest market for imported fish and fishery products owing to its growing domestic consumption. European Union imports reached US$44.6 billion in 2010 up 10% from 2009 and represents 40% of total world seafood imports.

The vital contributions from fisheries and aquaculture to global food security and economic growth remain constrained by an array of problems. These include poor governance, weak fisheries management regimes, conflict over the use of natural resources, the persistent use of poor fishery and aquaculture practices, a failure to incorporate the priorities and rights of small scale fishing communities, and injustices relating to gender discrimination and child labour.

The Potential for Value Added Seafood Products in Trinidad and Tobago

The seafood industry has been contributing to the national economy for over 100 years, with numerous opportunities for investment, from boat building to seafood processing and merchandizing. In terms of throughput and distribution, the bulk of the high value species are exported primarily as chilled product, either headless and gutted in the case of tuna, or gutted as in the case of snappers. Exported chilled seafood usually ends up in the catering and hospitality sector of international markets or in open markets of the region either as a frozen or chilled product.

On the other hand, most of the medium-to-low preference species such as croaker and flying fish, form the bulk of the landings, and are marketed fresh, or processed as frozen product for the local and regional markets. Processors import whole frozen fish in bulk for re-processing into steaks and other market forms. Local supermarkets also carry abundant supplies of imported chilled and frozen value-added products. Those include fish nuggets, burger patties, fish sausages, crab cakes, fish fingers, cured products (smoked and salted) and canned products.

Value adding is defined as any step in a production process that improves the product for the customer and results in a higher net worth.

There is potential for the manufacture of local value added products right here, especially if low preference species are utilized to produce a range of comminuted (minced or ground) seafood products, such as fish fingers, fish sausages and delicatessen fishery products as well as cured fish.

Some of the low preference species that can be used for producing value added fishery products include cavalli, cutlass fish, moonshine, bonito, sea trout, banane and mullet. These species are fairly inexpensive and are available locally.

Consequently there are varying investment opportunities in the production of value added products. Salting and smoke drying can be done at the “cottage level” and require minimal investment. Production of fish sausages, patties, or fish jelly on the other hand, require substantial investment in buildings and equipment, and are more suitable for established fish processing facilities with excess capacity.

Value added products made from local low preference species can be an affordable alternative to imported products.



Gravlax made from yellow fin tuna. Gravlax is a semi preserved dish prepared by marinating the flesh of tuna with salt, sugar and dill.

The creation of jobs in coastal fishing communities and the utilization of often discarded by-catch would contribute towards a more sustainable use of scarce fisheries resources and bring greater revenue to the fisher folk.

The advantages of adding value to local seafood include:

- ✓ Reduced food import bill
- ✓ Sustainable long term productive employment
- ✓ Better economic activity
- ✓ Increased national food security

It should be noted that, the technology has already been developed by the Caribbean Fisheries Training Institute (CFTDI) for the production of a range of value added seafood products from local low preference species. Training is also conducted through its various seafood technology programmes.

SIDC 'On de Seine'

Commissioning Ceremony for the Refurbished Fullerton Fishing Facility

On 10th October 2012, the newly refurbished Fullerton Fishing Facility was commissioned by Senator the Honourable Devant Maharaj.



Senator the Honourable Devant Maharaj and President of the Fullerton Fishing Association, Mr. Kemran Ramcharan



Senator the Honourable Devant Maharaj unveiling the commemorative plaque

Lakshmi Girls' Hindu College Science Fair

The SIDC participated in the Lakshmi Girls' Hindu College Science Fair on 17th October 2012. The objective was to promote awareness on seafood technology, aquaculture and careers in the seafood industry. At the end of each session a quiz was conducted, and students who answered correctly won prizes.





Enterprise Hub Business Start-Up Expo

In commemoration of Global Entrepreneurship Week (November 12th-16th), the Seafood Industry Development Company (SIDC) participated in the Business Start-Up Expo on Wednesday 14th November 2012 at the Centre of Excellence.





The event featured booths from various exhibitors, mini seminars and presentations by entrepreneurs. The SIDC highlighted "Investment Opportunities in the Seafood Industry " that covered aquaculture to seafood technology.

Fish Protein Could Be Future of Fat-Reduction in Fried Foods

The possibility of fried seafood with significantly reduced fat may not be that far-fetched. Thanks to donations from the Seafood Industry Research Fund (SIRF), researchers at Oregon State University (OSU) have been working on a project that drastically reduces the fat content in fried seafood using fish protein found in surimi (fish jelly).

Surimi are refined fish proteins made from a variety of species. It is popularly used for a fried dish (fried surimi seafood) in Asian countries and has a very low fat content (approximately two per cent). This initially peaked Dr. Jae Park's interest into further researching its fat blocking properties.



"After doing some initial tests with typical fried US products like chicken nuggets and French fries, we saw that the fried surimi product was consistently low in fat," said Dr Jae Park, professor at OSU's department of Food Science and Technology and OSU Seafood Research and Education Center (Astoria, OR).
"We thought if it's the fish protein that is minimizing the fat uptake, how can we use that on other fried seafood to get the same results?"

After two years of research, Park and his team have developed a fat blocker solution from surimi protein that has successfully reduced the fat content of fried shrimp.

"Typically when you fry chicken nuggets or fish, you get a fat content of about 16% and 10% respectively," explained researcher Angee Hunt. "When we fried the breaded shrimp by coating it with our fat blocker solution, the treated shrimp had 15% to 20% less fat compared to untreated shrimp.

The scientists believe the fish protein creates a protective layer around the food to reduce fat uptake and retain moisture, without altering the taste or texture of the product.

"This fat blocker solution could potentially have a huge impact on the whole food industry," Dr. Park said.
"At a time when Americans need to eat more seafood and choose healthier fried seafood options, this could be an easier way for them to improve their diets while still allowing people to eat some of their favourites."

The work is ongoing and in order to continue research, Dr. Park and his team are currently in search of more funding to achieve their goal of fat reduction by 50% or more.

Source: http://www.thefishsite.com/fishnews/18352/fish-protein-could-be-future-of-fatreduction-in-fried-foods

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Front cover photo: Analogue of salmon made from shark (pg 6).

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