Fish IN

Volume 3, Issue 4
December 2010

Newsletter of the Seafood Industry of Trinidad and Tobago



Contents

Distribution Channels.....2
Fish Fest 2010.....4
There's no taste like home.....4
Moruga Landing site.....5
Fisheries Regulations.....6
Recipe.....7
Seafood and Health.....8

A Publication of the Seafood Industry Development Company Limited

Distribution Channels of fresh and frozen seafood in Trinidad and Tobago



There are many ways in which seafood is distributed to the consumer namely: fresh; frozen; canned and cured (salted, dried or smoked etc). The primary demand in Trinidad and Tobago however, is for fresh seafood.

The rate of deterioration of fresh seafood is well known and because of this, the distribution channel through which it reaches the consumer is very important. A distribution channel refers to the system in place to provide consumers with an end product. Fresh seafood is landed at ninety eight (98) fish landing sites in Trinidad and Tobago. The channel by which it is distributed comprises a network of vendors purchasing from the fishermen and distributing throughout the system as shown in the diagram below.

LANDING SITE

At the landing sites seafood is procured for both wholesale and retail.



WHOLESALE

There are three wholesale seafood markets in Trinidad *(Sea Lots in Port of Spain, Orange Valley and Kings Wharf in San Fernando).* In Tobago there are four principal purchasing areas (Scarborough, Pigeon Point, Plymouth and Charlotteville). Seafood is sold to processing plants, retail vendors, restaurants, hotels and supermarkets. These are distributed and sold as wet seafood (seafood on ice).

Generally wholesalers sell their seafood to processing plants on a contractual basis. The processing plants process the catch into a variety of chilled, frozen and cured (salted, dried or smoked) products either for export or for sale locally in supermarkets and fish shops.

At the wholesale market, seafood is sold by the wholesale vendors to:

- *Retail vendors who operate in the various district and municipal markets*
- *Restaurateurs and hoteliers*
- *Itinerant and roadside vendors*
- *Large purchase consumers (such as Processors)*
- *Other Consumers*

RETAIL

The retail fish network consists of sale via:

* Municipal Markets
* Roadside Vending
* Itinerant Vendors
* Supermarkets
* Fish Shops

Seafood is purchased at the municipal markets by the general public. The turnover may vary between two and five days depending upon the season, for example during the Lenten/ Easter period, turnover is very rapid while during the Divali period it is very slow.

Roadside vending is common throughout Trinidad while it is not common in Tobago. Generally the fish may pass through the system

several times before it ends up on the fish stall so that quality may not always be assured. The itinerant vendor on the other hand also obtains his fish from fishermen on the beach or the wholesale fish market and travels through various districts on pick up vehicles selling their goods.

The supermarket trade in fresh and frozen seafood and fishery products is supported by the supply from processors and wholesalers. In the latter case, the product is prepared and packaged in the supermarket itself.

The product range comprises drawn fish, fillets, steaks etc and may either be on ice, or packaged as chilled or frozen.

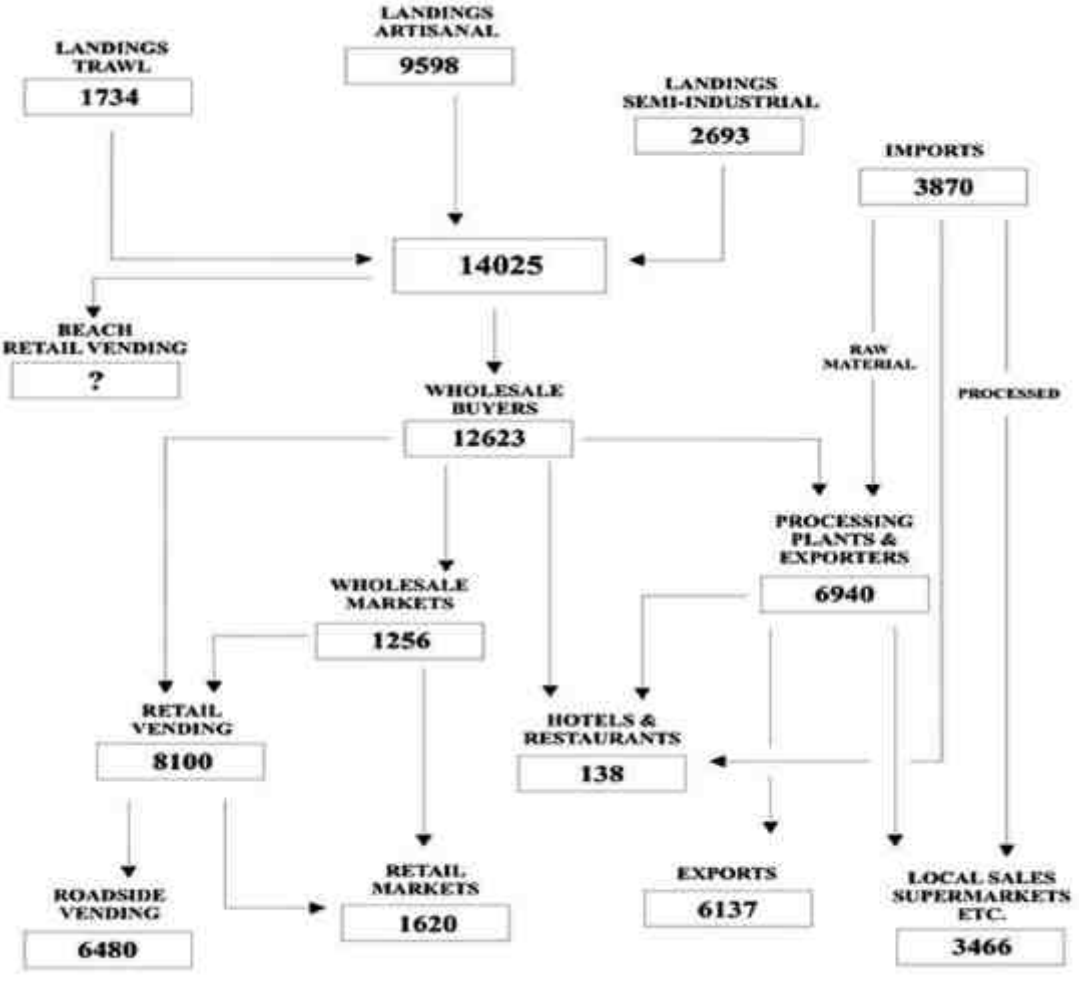
A supermarket survey done by the SIDC in 2007 indicated that over six processing facilities supplied both chain and non-chain supermarkets with a variety of chilled and frozen fishery products.

A growing trend in Trinidad and Tobago is the emergence of seafood shops. There are approximately ten such shops which serve as retail outlets for processing plants or as stand alone facilities.

Their product range include chilled, frozen and other seafood items including delicatessen products. The product supply comprises a mix of locally produced and imported products.

The diagram below shows the throughput of fish production (Trinidad and Tobago) for the period 1999/2000.

Throughput of Fish Production (MT) for 1999/2000 (Kuruvilla *et al 2002*)



There's no taste like Home



The SIDC in collaboration with the Caribbean Fisheries Training and Development Institute (CFTDI) and the Aquaculture Association of Trinidad and Tobago (aQuatt) participated in the Ministry of Food Production, Land and Marine Resources "Food Fest Exposition".

The event was held at the JFK Quadrangle, University of the West Indies, St. Augustine, from November 12th-13th, 2010. The theme for the exposition was *"There's no taste like home".*

The SIDC, CFTDI and aQuatt had on display a Tilapia Aquaponics system, SIDC's seafood cookbook, fish products (fish sausages, salted shark, fermented fish sauce etc) and other industry related information.

The exposition was held as part of ongoing activities by the Ministry of Food Production for "World Food Day" celebrated on October 16th, 2010. The theme of this year's observance being "United Against Hunger". This theme was chosen to recognize the efforts made in the fight against world hunger at national, regional and international levels.





Fish Fest 2010



The SIDC in collaboration with the Hilton Hotel hosted "Fish Fest 2010", a six day event at the Hilton's Pool Terrace Garden Restaurant from the 18th – 23rd August, 2010. The objective of the event was to provide ongoing support for the sustainable growth of the local seafood sector.

It was a culinary experience, as Executive Chef Carlos Gomez and Sous Chef Ottley Alexis prepared Tilapia (which was locally farmed) and other species such as kingfish, salmon, tuna, crabs, lobster and shrimp.

Guest were able to hand pick their own fish for preparation by the chef and choose from a variety of culinary delights at the buffet.

Co-operative Week 2010



On July 2nd, 2010 the SIDC participated in an exhibition organized by the Co-operative Division of the Ministry of Labour and Micro Enterprise Development at the Promenade, Independence Square, Port of Spain.

The exhibition provided a forum for the SIDC to display its products (seafood cookbook and cooler bag) and provide information on the services that are offered to fisherfolk and other interested persons who would like to enter into the seafood industry.

Cookbooks for SERVOL

One of the strategic objectives of the SIDC is to promote the use of less preferred seafood species amongst consumers. In support of this objective the company published its cookbook entitled Caribbean Seafood Extravaganza.

In recognizing the importance of a shared responsibility towards achieving its goals, the SIDC donated thirty copies of its seafood cookbook earlier this year, to the Hospitality and Food Preparation Instructors of SERVOL for use in their training programmes.

Pictured (left) receiving the books is Ms. Allison Haynes-Wilson (Deputy Executive Secretary) and (right) Ms. Helen-Ann Mc David (Public Relations Manager) from SIDC's former Chairman Mr. Bruno Maharaj (center).





MORUGA Landing Site

Location

Moruga is located on the south coast of Trinidad. Fishing operations are artisanal and the fishing fleet consists of pirogues based at several sites along the Moruga coast, the most important being Grand Chemin. Fishing vessels also land at La Lune, Merac, La Retraite (on the Moruga river) and L'anse Mitan.

Infrastructure and facilities

The Grand Chemin fishing facility has a gear/ boat repair shed and locker rooms for the storage of engines and equipment. There is also a paved and sheltered area adjacent to the facility where fish is auctioned. The fishing facility at La Lune was refurbished in 1999 and consists of a gear/ boat repair shed and lockers.

Number Vessels	63 pirogues with approximately 60-80 fishermen operating in the area.
Main Fishing Methods	Gill Netting, Trolling lines and a la vive
Commercial Species	King Fish and Carite, Croaker, Shark, Cavali, Redfish and Sea Trout
Annual Landings (Fisheries Division 2001-2005)	800- 1200 metric tonnes with approximate ex-vessel value of TT$15.4 million



Fish & Fishery Products Regulations (1998)

The requirements for vessels used for fishing or transporting fish for processing: Regulation 66.(1) states areas where fish and ice are stored shall:

a) have covers to protect the fish and ice from the sun and weather;

b) be provided with drainage to effectively remove ice melt water and ensure that fish and ice do not come into contact with bilge water or other contamination;

c) where it is necessary to prevent physical damage to the fish, be divided into pens, which shall be shelved vertically at intervals of 90 cm or less;

d) be insulated and any pipes /conduits passing through the hold shall be sunken flush;

66. (2) Subject to sub regulation (3), fish and ice storage areas shall be of non-absorbent, non-corrodible materials, other than wood, and so constructed as to preclude physical damage to the fish and facilitate cleaning, and any surfaces that come into contact with fish shall be smooth and free from cracks and crevices.

66.(3) In the case of vessels having no below storage areas, built-in fish and ice storage areas shall be so constructed as to preclude physical damage to the fish. The surfaces should be smooth, free from cracks and crevices and coated with a durable, light coloured paint or coating of a type approved by the Competent Authority.

BOATING SAFETY TIPS!

Courtesy: www.iws.ie



Carry distress signal devices and a First Aid Kit



Carry alternative means of propulsion such as (Sails & Oars, or Motor & Oars)



Check local weather conditions concerning dangerous (currents, tides, etc.)

RECIPE - Farfalle Shrimp *(serves 4)*

INGREDIENTS

454 g (1lb) medium Shrimp (peeled and deveined)
3 blades of chive
56 g (2 oz) unsalted butter
10 g (1 tbsp) fine thyme
2 grated cloves of garlic
454 g (1lb) Farfalle (pasta bows)
2.5 g (½ tsp) salt
Ground black pepper



Photo courtesy: www.wayn.com

METHOD: Finely chop chive. Melt the butter in a saucepan and sauté the chive, garlic and fine thyme for 1 minute. Cut shrimp in half then add to saucepan and sauté along with the pepper and other ingredients for 5 minutes. Place pasta in boiling water with salt and cook until tender. Drain the pasta thoroughly. Toss pasta with the sautéed ingredients and serve immediately.

NOTE: Shrimp is marketed chilled or frozen, and is presented as headless, peeled and deveined or tail on. Good quality shrimp is dry and crisp to the touch, has a pleasant odour and mouth filling flavour. Poor quality shrimp is soft and mushy; its flesh peels easily away from the shell, has an unpleasant odour and may contain black spots on the body surface.

W F I S H P O T S E R G
Q S D R B N E H T Y G N
D R E R P S O S E U H I
W E F G E B N T N E S H
T R P N P N N E L U D S
Q W I V B T I N L Y Y I
N E R H V U N L I H U F
S W O V E N N W G E I E
U P G Y T W N A T N A N
P P U S N E N R F E O I
E Y E P Y T T T S V U L

WORD SEARCH

FISH fry CORNER

Fishpots
Gillnets
Line Fishing
Longliner
Pirogue
Seines
Trawler
Trawl Nets

SEAFOOD and HEALTH

Seafood refers to all types of fish, shellfish and plants that are harvested from the sea for human consumption and contains an abundance of vitamins, minerals, lipids and amino acids, which provide an array of health benefits to the human body.

Omega 3 Fatty Acids

You may have heard the term Omega 3 time and again, but what are Omega 3's? Omega 3 is a type of lipid. Lipids are a broad group of naturally-occurring molecules which include fatty acids, sterols, fat soluble vitamins (such as vitamins A, D, E and K) and phospholipids.

Omega-3's are unique types of polyunsaturated fatty acids which are often referred to as *"the 'good fats"*, because they possess properties which help reduce the amount of unwanted fats (the 'bad' fats) in the body. Bad fats are the ones responsible for clogging blood vessels which can lead to heart disease and high blood pressure.

Essentially, Omega 3's act as blood thinners, promoting healthy circulation whilst reducing several chemical and cellular processes that compromise proper heart function. These champion molecules also possess anti-flammatory properties and can reduce pain associated with Osteoarthritis and Rheumatoid arthritis.

Osteoarthritis is a common problem with the elderly particularly in the knees and hips, since these joints become less lubricated with age. The Omega 3 contained in fish oils assist with lubricating the joints and also help to relieve discomfort and swelling caused by Rheumatoid arthritis.

Another type of Fatty acids known as DHA (Docosahexaenoic Acid) are long chain omega-3 fatty acids which are especially crucial for pre-natal development. DHA forms part of the structural signaling system of the brain and is essential for its proper function. Pregnant mothers are therefore advised to eat fish in greater amounts especially during the last trimester when brain and neural development in babies is the greatest. Nursing mothers can continue to provide these benefits to their babies by eating seafood, since Omega-3's are also present in breast milk.

Vitamins and Minerals

Vitamins and minerals are substances needed in the diet in small amounts to promote growth, reproduction and the maintenance of health. Seafood contains a multitude of vitamins such as vitamins A, B and D. These vitamins promote proper vision, digestion and calcium absorption respectively. Seafood is also a rich source of minerals such as calcium, iodine, fluorine and selenium. The latter has been identified in cancer prevention.

Amino Acids

Amino acids are the building blocks of proteins in our bodies. They are categorized as essential and non-essential. Glutamate is an important amino acid, found in all protein containing foods. This amino acid is one of the most abundant and important components of proteins. Fish is one of the many protein sources in which glutamate occurs naturally. Glutamate is vital for metabolism and proper brain function.

Seafood, alone cannot prevent the onset of disease, but it may delay some conditions or make them less likely and less severe.

To maximize the benefits of consuming seafood, consider the species consumed, proper handling and storage practices, hygienic methods of preparation, ingredients utilized in preparation, frequency of consumption and portion size.

Seafood is an excellent health food choice so, for healthier babies, improved health, and countless nutritional benefits, include seafood at least twice a week in your diet, with a serving size of at least 3.5 ounces.

Editorial Committee:
Doon Ramsaroop - CEO
Charles Nurse - QA Specialist
Omadath Sookram - IT Specialist
Venessa Mawahlal- Project Assistant

Seafood Industry Development Company Limited
6 Bejucal Extension 1, Uriah Butler Highway,
Charlieville, Chaguanas,Trinidad & Tobago W.I.
Phone: 1-868-665-0751
Fax: 1-868-671-8932
Website: www.sidctt.com
Email: info@sidctt.com