The artisanal fishermen of the Seychelles are experimenting with labels to promote responsible and sustainable fisheries

For fishermen of the Seychelles, 14 December 2009 was a red-letter day. That was when the first consignment of 250 kg of labelled fish (red snapper, jobfish and groupers) was shipped to Rungis, the wholesale food market in Paris, much to the delight of French restaurateurs who are already demanding more of such fresh tropical fish, whose traceability is guaranteed by the label tagging done on board the fishing vessel by the fishermen themselves.

But behind the pretty, picture postcard image of the Seychelles as a tranquil holiday paradise lies the reality of a people whose daily lives are intimately bound up with the mercy of the ocean.

Strategically located in the middle of the Indian Ocean (1,800 km from the African coast, 1,100 km off Madagascar and 2,500 km from India), the Seychelles consists of 115 granitic and coral islands occupying a land area of 453 sq km (for comparison, France occupies 549,000 sq km). The archipelago has an immense exclusive economic zone (EEZ) of 1,340,000 sq km, rich in fishery resources.

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The 86,000 inhabitants of the Seychelles come from a melting pot of colour, culture and race, from five continents. Each family has some link with the marine world and artisanal fishers, especially hook-and-line fishermen, play the most important roles in the nation’s fisheries.

The Seychelles produces 450,000 tonnes of fish per year, and nearly 4,000 people (about 15 per cent of the active population) are engaged in fishing and fishery-related activities, which comes second behind tourism, as the country’s most important economic activity, contributing to 40 per cent of its national income.

Industrial fishing was initiated in 1983 when around 40 tuna seiners, mostly of European (French and Spanish) origin began operating out of Victoria. The Seychelles’ EEZ is very rich in tuna (yellowfin and bigeye), and 350,000 tonnes of tuna are landed annually, much of which is processed onsite by Indian Ocean Tuna (IOT), the second-largest cannery in the world, which employs over 2,000 people. Around a hundred foreign longliners annually harvest about 88,000 tonnes of tuna, swordfish, sharks and sea cucumber.

Source of protein
Artisanal fishing accounts for an annual production of 4,000 tonnes of fish—emperors, red snappers, jack fish, jobfish and groupers represent 83 per cent of the catch, whereas mackerel, tuna, sharks and octopuses share the remaining 17 per cent, caught close to the shore. In a country where each inhabitant consumes an average 62 kg of fish per year (compared to 21 kg in Mauritius and 60 kg in Japan), fish is the primary source of protein and ensures food security for the population. The 1,700 or so fishermen who depend on the future availability of the Seychelles’ fish

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resources face several difficulties, namely, rising living and operating costs, competition with industrial fisheries, environmental degradation, and climate change. From 2010, the certification of fish and fishery products as originating from legal fishing (not from illegal, unreported and unregulated or IUU fishing) will become mandatory for exports. Though good in principle, this new requirement could create problems with the amount of checks required for certification.

Hook-and-line fishing, which is selective of both species and size, is the oldest and most widely practised fishing technique among artisanal fishers in the Seychelles. Three types of line fishing are practised: set bottom fishing, ball bottom fishing (in which the bait—mackerel or bonito—and part of the line are coiled into a ball with sand) and bottom fishing adrift. The main catch is snappers (red snapper, humphead red snapper), jobfish, jacks and multicoloured groupers.

Until the 1980s, small-scale coastal fishing was carried out from wooden canoes made from almond trees, using traps, longlines or purse-seines.

The liners originally used wooden whalers (open canoes with sails) or small schooners, all built of timber from the takamaka tree, which withstands rot. The most famous shipyards were those on the islands of Praslin and La Digue. For years, the fish was salted on board. This practice began to change in 1967 with the arrival of ice on the island of Mahé, through the service of the brewery Seybrew, the first industrial unit to manufacture and sell ice.

Today, whalers and schooners, of flamboyant colours and 6-16 m long, are built from fibreglass, more often in Sri Lanka, and equipped with diesel engines of 40-45 hp. Shipyards have virtually all disappeared from the Seychelles. The ones which survived, such as the Souris shipyard in Victoria, are adequate for maintenance and expansion services. Many owners prefer to refurbish boats rather than order new ones.

The fishing crew, exclusively male (with notable exceptions), consists of a skipper and three to six crew members. They leave for the open seas for six to 12 days, up to the limits of the Seychelles continental shelf, between 20 to 100 miles (161 km) from Mahé. Some even go as far as the Amirantes islands. Fishermen from Mahé leave port early in the morning from Victoria, Anse Royale, Anse Boileau or Bel Ombre. Those from Praslin leave from Baie Sainte Anne, while those from La Digue depart from La Passe. They sail at six knots to reach the fishing grounds, whose location is a jealously kept secret. As soon as the wind picks up, the sail is hoisted to save precious fuel. All vessels are equipped with a global positioning system (GPS) and a very high frequency (VHF) radio, and some even have vessel monitoring system (VMS). They fish on the slope of the shelf or on shoals at a depth between 20 and 60 m. For bait, they use skipjack tuna discarded by purse-seiners (as bycatch) or, rarely, locally caught mackerel.

**Fishers’ stories**

Many Seychellois fishermen have powerful stories to tell, and no two stories are alike. Some were brought to the profession by destiny, others by passion. Patrick, a young skipper of a small longliner, says: “In my family, there was no sailor or fisherman; it was
not an acceptable profession. Some even tried to discourage me. But for me... it was obvious... I had no doubt that my life would be spent on the sea”. Today he is proud to be in charge of the *MV Pisces*.

Keith, another fisherman, says: “In my family, we had no idea what would be the job of a fisherman. Yet I was secretly very attracted to the profession, especially when I listened to stories of my friends who were sons of fishermen. I made this choice against the advice of my family, and I do not regret it, even if the situation has become more complicated nowadays”.

Many regard fishing as the refuge for dropouts. And yet fishing has created several respectable and independent men with a high social status and promising careers.

Rose, from Praslin, nicknamed “Serieux-Vrai”, (“Serious-Honest”), is indeed the perfect example. “At school, I felt out of place, marginalized, was never listened to and was misunderstood by teachers or students,” he recalls. “I was not very talented with what I was asked to learn. However, I knew the names of all the fish as well as how to bring up the lines better than anybody else. I started going to sea at 14 years and every day I learned something new! Gradually, I acquired a real know-how, and now I’m in charge of a small boat. This work allows me to feed my eight children and to be happy and respected”.

Some families have had a bond with the sea for generations. These ‘clans’ are proud of their profession, around which the family is organized. Take the case of Ken, Elvis and Beatty, three brothers who are united in complementing one another in fishing. Elvis is the skipper of the *Albacore*, a beautiful longliner co-owned with Beatty and their wives. Ken is the owner of *La Fleche*, which he commands along with his son, as well as another small boat. Both practice *palangrотte* fishing (a simple technique involving lengths of nylon and a few hooks, payed out by hand or left dangling from a floating piece of cork). Beatty, a former banker, is very actively involved in managing the family business and also owns a small schooner. "Fishing is our business and our livelihood, but it is important that it allows us to live longer and that future generations get to enjoy it. It would be foolish to cut the branch on which we sit. Fishing is sustainable if it is managed on a long-term basis. Our vision is the sustainable development of our fisheries through responsible management of our resources," he says.

Though fishing boats have improved over time with modern fittings and deck cabins, the living conditions on board are still very hard. Some have not enough space for the crew and rest areas are very restricted. According to Boboy, who owns the schooner *Labrine* on the island of La Digue, "The fishers, who go for eight to 12 days, must feel good on board... It’s their second home! This is important because the job is hard and if conditions remain difficult, no young person will want to take to fishing, even with a good salary!”.

Some boats may well follow the career of their skipper-owners. *Labrine*, for example, has been sent to the shipyard four times since Boboy had it built in 1984. "It might be more profitable to sell this boat and buy another,” he says, "but *Labrine* is my boat, my second home, my livelihood and I could never work on another boat, just like my crew. Besides, *Labrine* was developed in our company and has evolved there. It resembles us and we know very well how to work on it”.

**Red snapper**

Perhaps the most emblematic fish in the Seychelles is the red snapper (*Lutjanus spp*), whose exceptionally enticing taste has inspired chefs into creative recipes. Seychellois cook it the Creole way for special occasions and family celebrations.
fishing is the main technique used to catch red snapper, mainly by artisanal day fishers. The schooners that leave for several days are equipped with hand or motorized reels to haul in the catch.

The bait used is usually mackerel or other fodder fish; sometimes artificial bait is used. The hooks used are ‘circle hooks’, which avoid the catching of turtles and seabirds, strictly protected in the Seychelles. The size of a hook determines the size of the fish caught, and so only adult red snappers that have already reproduced are captured. The lines are used in a wide range of depths, depending on the location, the current or the season. This technique makes it possible to fish in rocky depths where the fish can hide.

Equipped with lines, hooks and bait, the schooners leave for six to 12 days in search of bourgeois (snapper), jobfish, groupers or trevallies. During the trip, the men will have very little sleep and must share the small restricted space. Their courage is fuelled by short periods of sleep and meals prepared with care by one of them. It takes courage and patience to find the place and time for that magic haul. It also takes courage to fight fatigue and the sea, which can be capricious and dangerous. Each year many lives are lost at sea, especially during the southeast monsoon, which generates very strong gales, just like in the Mediterranean.

Fish is the single most important source of food and protein in the Seychelles. It is also part of the culture and heritage of the country. But serious threats to artisanal fishing are emerging: the rise of industrial fishing and farming, and the influx into the market of fish from multiple sources, often caught by destructive and unsustainable methods. In addition, capital costs and current prices do not provide enough returns for a decent living for artisanal fishermen. These factors have encouraged Seychellois fishermen to look for new opportunities and solutions. An active group is involved in a labelling programme in partnership with the Association des Ligneurs de la pointe Bretagne (ALPB), a group of hook-and-line fishermen, who catch mainly sea bass in Brittany. They have organized themselves with the support of the Fishing Boat Owners Association (FBOA).

The partnership between the two associations has led to an exchange of knowledge and experiences about the future of fisheries, the management of resources, and globalization.

Drawing on the guidelines of the Food and Agriculture Organization of the United Nations (FAO) for labelling of products from marine capture fishing, the partnership focuses on the changing needs of today’s consumers, who are sensitive to information about seafood quality and origin, the fishing techniques used to land the catch, and their environmental impacts. Fairness in trade and working conditions is also an increasingly important criterion in consumer choice.

Under the partnership programme, a label will accompany each fish until it reaches the consumer. The label will inform the consumer who caught the fish, where and how. A strong and direct link is thus established between the fisherman and the consumer.

The labelling campaign is focused on seven species of fish. It will allow fishermen to participate in the management of resources while improving their incomes. The first order of labelled led to a 25 per cent increase in the price of fish sold, despite market sluggishness.

The programme has opened up new opportunities for Seychellois fishermen, allowing them to demonstrate the selectivity of their fishing techniques, to stand out from the industrial fishing sector, and to become real stakeholders in the management of resources. Hook-and line fishermen are committed to prove that sustainable fishing is possible and that consumers can choose products from a responsible fishery. The Seychelles’ hook-and-line fishermen appear set to take charge of their destiny.