

Tonnes of tuna

Tuna fishing is a longstanding livelihood activity among Filipino fishers but, as catches increase, sustainability measures are called for

Situated in a region that boasts great marine biodiversity and one of the most abundant tuna resources, it is not surprising that the Philippines ranked 11th in world fisheries production in 2001 and was the fourth-largest producer of tuna and tuna-like species in the world in 2003, according to the FAO Statistical Database (FAOSTAT) of the Food and Agriculture Organization of the United Nations (FAO).

Tuna fishing is a longstanding livelihood activity among Filipino fishers, especially in the southern Philippine provinces. In 2003, the Philippines ranked second in tuna production in the western central Pacific region, accounting for 22 per cent of the total catch. Although tuna resources are distributed throughout Philippine waters, the major production areas are the (i) Moro Gulf/Celebes Sea, (ii) Sulu Sea and (iii) South China Sea. In addition, Filipino fishers are also known to exploit tuna fishing grounds outside the Philippines, such as in Indonesia, Papua New Guinea and the Solomon Islands.

General Santos City is the country's tuna capital. Its reputation started to gain prominence in the 1970s due to its proximity to traditional tuna fishing grounds. The establishment of processing and canning corporations as well as post-harvest facilities like ice plants backed up the rapidly expanding tuna industry. The government supported the industry with the construction of an airport in 1991 and the General Santos City Fish Port Complex (GSCFPC) in 1998.

The boom in Philippine tuna production is generally attributed to the successful use of the fish-aggregating device (FAD) locally known as *payao*, which greatly reduced the time spent for searching and catching tuna. Production accelerated

rapidly from 2002, primarily from the output of the commercial fishers. However, the official estimate of the tuna catch for the previous years does not reflect the productivity of Philippine waters. This is because producers and canneries landed their catches in private ports and under-reported the catch to reduce taxes. Also, tuna caught outside Philippine waters were being reported as caught inside the Philippines. More recent data are expected to be more reliable for fishery-management purposes, particularly with the more extensive use of the GSCFPC.

The major tuna species are skipjack, yellowfin, bigeye, eastern little and frigate. Oceanic tuna (skipjack, yellowfin, bigeye, northern bluefin and albacore) are predominant in deep waters beyond the continental shelf, and are part of the regional stocks of the western central Pacific Ocean. Skipjack, yellowfin and bigeye tuna spawn extensively in Philippine waters, with juvenile tuna making up a high percentage of the standing biomass of all species. Neritic tuna (eastern little, frigate, bullet and longtail) are abundant in inshore waters.

The major tuna producers in Philippine waters are handliners and purse-seiners. A moratorium on the issuance of additional licences for commercial fishing vessels (purse-seiners, tuna ringnets and longliners) was passed in 2004 in order to abate overfishing. No other foreign-flag vessel is allowed to fish in Philippine waters, but foreign vessels have been regularly apprehended for illegal fishing.

International market

The primary producer of the high-priced Class A or *sashimi*-grade tuna destined for the international market are the small-scale handliners found all over the

Table 1. Estimated Tuna Fleet Structure

Type	Tonnage	Estimated Number	Fishing Grounds
Handline <i>Bancas</i>	Up to 60 GT	3,000	Philippines, Indonesia, Palau, high seas, Papua New Guinea
Purse-seiners			
1. Small purse-seine	<250 GT	110	Philippines, Indonesia
2. Large purse-seine and super-seiners	>250 GT	54	Papua New Guinea, Indonesia, high seas
Tuna Ringnet	> 100 GT	100	Mostly Philippine waters
Long liners			
1. Domestic		14	Mostly Philippine waters
2. Distant-water		25	Pacific, Indian and Atlantic ocean

Source: Barut & Garvilles, 2005

country. The adult yellowfin, skipjack and bigeye tuna are the common species caught by handline fishing.

The tuna boom in General Santos City has attracted poor fishers from different provinces in southern and central Philippines to seek their fortune in tuna handling. Depleted waters adjacent to the Philippines have pushed handliners to fish outside local waters. Handliners are not required to report where their catches are caught since they are not part of the bilateral fishing agreements with other countries. No reliable estimates can be made regarding catches outside the Philippines but it is generally accepted that more than half of the landed catch of large tuna from municipal fishers come from beyond Philippine waters.

There are two types of handline fishers, the *palaran* (catcher of flatfishes) and the *pamariles* (catcher of yellowfin tuna). The *palaran* handliner is confined to the municipal waters (that is, within 15 km of the shore), while the *pamariles* fishers can venture to distant waters that are even beyond the Philippine exclusive economic zone (EEZ). The *palaran* uses a simple vessel with outriggers to catch a wide variety of fish in the municipal waters. Due to the small size of the vessel, only a limited amount of ice is carried on board. This usually results in lower

quality of landed tuna that is not suitable for the export market.

Among the several issues faced by the *palaran* are:

- the declining catch in municipal waters due to overharvesting, destructive fishing practices (like cyanide and dynamite fishing), water pollution, and the degradation of coastal ecosystems (mangrove forests, corals, seagrass) due to various development initiatives (like fishpond and resort construction);
- theft of engines by 'seajackers'; and
- lack of capital to invest in more efficient gear and/or *payaos*.

The *pamariles* specifically target adult tuna intended for the export market. Their fishing craft comprise a mother boat, usually of 15 gross tonnes (GT) size, that carries several auxiliary boats on its outriggers. The mother boat transports the auxiliary boats to the *payaos*, where they scout for tuna. The *payaos* are usually owned by purse-seiners but handliners are sometimes allowed by the purse-seiners to harvest fish in their *payaos* as long as they respect the priority use rights of the purse-seiners and do not cut

the anchor line. The mother boats are usually equipped with radio sets, compasses and a global positioning system (GPS), and can carry up to 6-18 tonnes of ice. Depending on the size, the pumpboat can carry a crew of eight to 20.

The favourite fishing grounds of the *pamariles* are in the Moro Gulf, the Mindanao Sea and the waters surrounding Davao and the islands of Tawi-Tawi. Due to the declining catch, the bigger handline vessels scour the international waters (off Indonesia, Australia, Papua New Guinea and Fiji) for tuna, despite the looming threat of apprehension and detention for poaching. (In 2002, a bilateral fishing agreement for Philippine fishing vessels to access Indonesian fishing grounds was reached with the Republic of Indonesia, which will last until 2011.)

The players in the *pamariles* fishery include fishers, financiers, brokers, boatowners and pumpboat operators. A common sharing system between these players is *lilima* wherein the fisher gets 20 per cent of the actual gross sale of captured tuna for every fishing expedition.

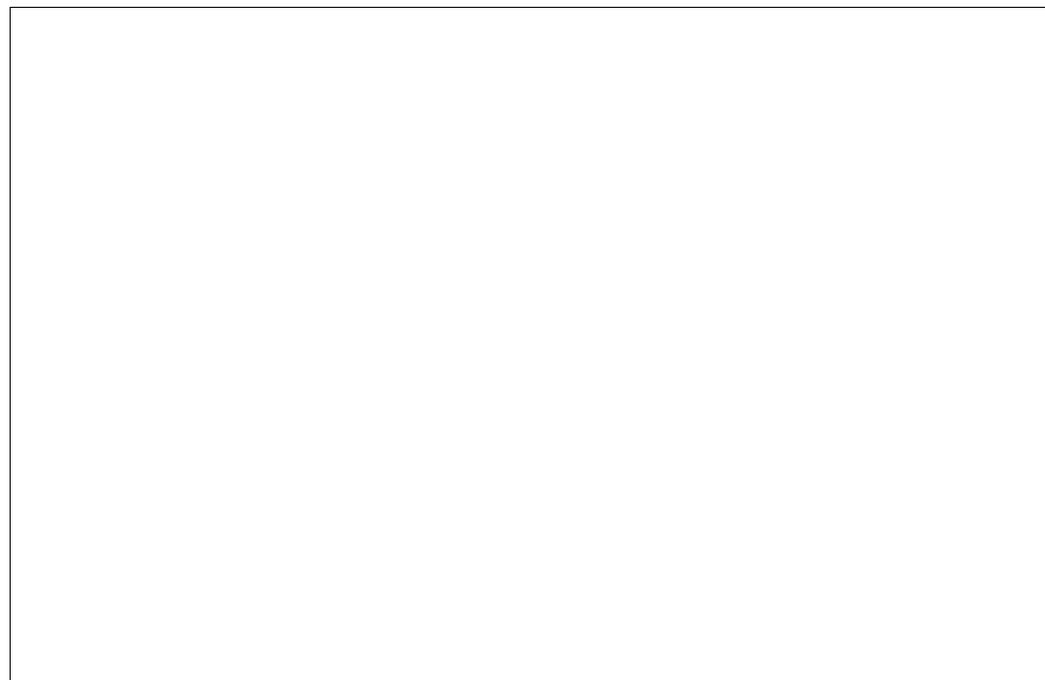
The issues faced by the *pamariles* include:

- safety at sea;

- threat of arrests by foreign authorities for poaching;
- rising operating expenses, specifically for fuel;
- stagnation in fish prices;
- entry of cheap imported and smuggled tuna products that unfairly compete with the local catch;
- stiff European Union (EU) standards, which are considered impractical for handline pumpboats and limit their entry into the EU market;
- absence of representation in the National Tuna Industry Council; and
- classification of handliners as commercial fishers, thus subjecting them to higher fees and excluding them from enjoying the use rights reserved for traditional fishers.

Cannery grade

Canners in General Santos largely depend on purse-seine fishers for their raw supply of tuna. Purse-seining is a fleet-based operation that occurs in the open sea for six months to a year. Sixty per cent of the



purse-seine catch is cannery-grade quality meant for processing, 35 per cent are delivered to the outside domestic markets, and the remaining 5 per cent are consumed locally. It is estimated that the purse-seine sector provides jobs to at least 15,000 people in General Santos City.

As handliners target adult yellowfin in the deeper column of the water, the purse-seiners (and ringnets) gather mainly juvenile tuna (mostly yellowfin and skipjack) that aggregate near the surface of the water. Studies have shown that more than 90 per cent of the catch of commercial fishers in southern Mindanao is under 12 months of age. This smaller-sized tuna catch is unsuitable for export in the fresh/frozen/chilled form. Tuna that weigh heavier than 300 grams go to the canneries, while the rest are sold to the domestic market.

The issues associated with purse-seiners include:

- access to foreign fishing grounds;
- rising operating costs;
- increasing overfishing with the use of fine-mesh nets; and
- overproduction that threatens resource sustainability and depresses fish prices.

The total output from 16 tuna canneries in 2003 was 10.5 mn cases, equivalent to 250,000 tonnes of raw product (mainly oceanic tuna). Over 90 per cent of such output is destined for the export market. Favourable trade arrangements are pushing tuna canneries to develop new product lines (like pouch packs). Outside the Philippines, there are two canneries in Bitung, Indonesia, and one in Madang, Papua New Guinea, which are Filipino-owned. The canneries in Indonesia process an estimated 20,000 tonnes per year, while the canneries in Papua New Guinea process 30,000 tonnes annually.

Close to 8,000 people work in the tuna canning industry of General Santos City. Most cannery workers are hired by canning firms through workers' co-operatives. The terms of employment are based on contracts that are continuously renewed on the basis of performance and the labour needs of the canning corporations. Workers consider the canning plants as the best employers in the city in terms of job tenure and remuneration. Nonetheless, the turnover rate of employees is considerable due to the tiring and long hours of work.

Some of the issues identified by the stakeholders in the canning industry are:

- high price of raw materials due to the decline in the purse-seine catch

and expanded taxes;

- tariff and non-tariff barriers of the major export markets (EU and the United States); and
- weak promotion or branding of Philippine products.

The Philippines' tuna industry contributes significantly to the country's international trade, both as an export and import commodity. The top export tuna commodity is canned tuna, which earned US\$111.8 mn in 2003. Fresh/chilled and frozen tuna products reached US\$44.7 mn in exports in 2003. For these products, the US is the market local exporters prefer over Japan because of more stable prices and more lenient standards.

The major issue affecting the processing sector is the saturation of the US market. After the EU ban on smoked/frozen products from Asian countries, the US market suddenly became flooded with processed imports from the Philippines, Indonesia, Thailand and Vietnam, triggering the drop in prices.

Canned tuna, mainly from Thailand and the Philippines, used to face a crippling 24 per cent tariff in the EU, compared to the 0 per cent tariff for products from the Andean countries. Through a long negotiation process, the EU offered a compromise of 12 per cent tariff on a quota of 25,000 tonnes, to be shared by Southeast Asian countries in 2003. This allowed the Philippine tuna canneries to recover and increase operations.

In terms of import, fresh/chilled/frozen tuna intended for the canneries figure amongst the top three fishery product imports of the Philippines. Local producers have long protested the entry of imported tuna because it depresses local prices. However, the strong export demand for canned tuna, the relatively low price of imported tuna and the need for a stable supply to keep the canneries operational at profitable levels led to the continued import of tuna. The continuous growth of tuna landings, based on official figures, suggests that tuna stocks are still being harvested below the maximum sustainable yield (MSY). The 2003 stock

assessment reports of the Scientific Co-ordinating Group of the Preparatory Conference of the Commission for the Conservation of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC) revealed that tuna stock in the region have not been fully exploited. Skipjack is not being overfished and the stock is not in an overfished state. Yellowfin tuna are not being overfished but the stock is nearing full exploitation, especially in the equatorial region.

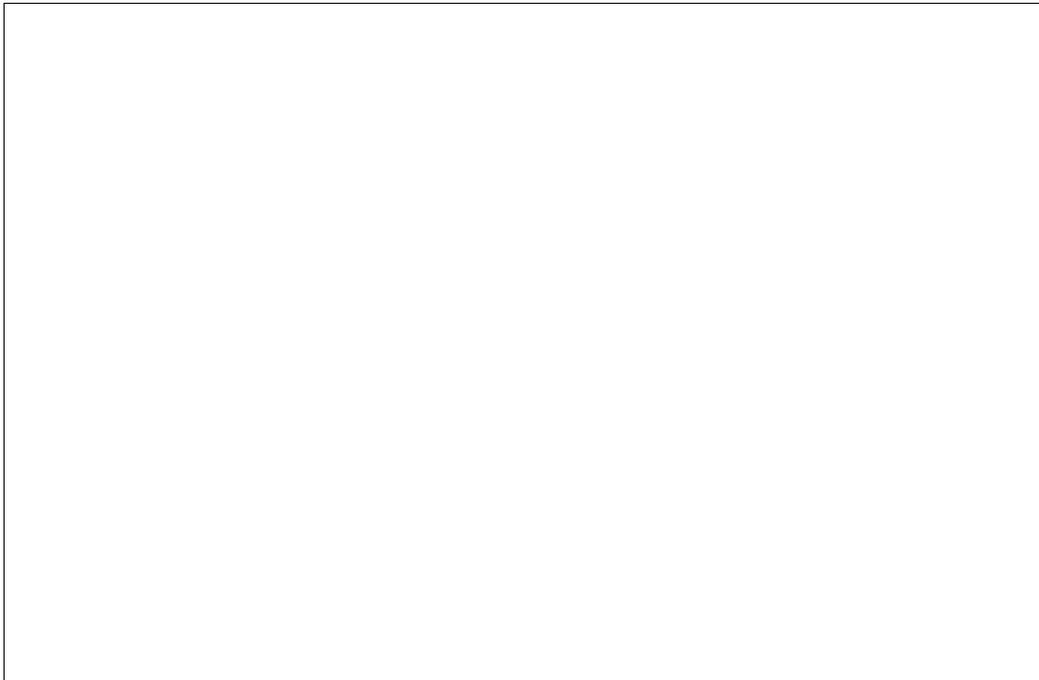
Bigeye tuna findings are inconsistent with previous studies but the conclusion is that overfishing is occurring but the stock is not yet overfished. However, the imminent collapse of Philippine tuna fisheries has been predicted because of the increasing catches and the widespread use of *payao*.

The Philippines is a signatory to the United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) and is a member of the WCPFC, the Indian Ocean Tuna Commission (IOTC) and the International Commission for the Conservation of Atlantic Tunas (ICCAT).

Faced with a myriad of resource-use, management and trade problems, and the need to commit to regional management regimes, the tuna industry in 1999 organized itself by creating the South Cotabato, Sultan Kudarat, Sarangani, and General Santos Federation of Fishing Associations and Allied Industries (SFFAAI). The federation aimed to unite the diverse sub-sectors of the tuna industry; serve as a forum to discuss problems and how to resolve them; and represent the tuna industry in lobbying for policy reforms and other concerns that affect it. A national confederation soon followed.

Fishing agreements

In 2000, the government created a National Tuna Industry Council (NTIC) to formulate a strategic action plan for the industry; review and recommend policies affecting bilateral and multilateral fishing agreements, and trade relations; recommend projects and programmes for the benefit of the industry; co-ordinate with private and public entities affected by the action plan; and establish an



integrative and intersectoral mechanism for collaboration. The NTIC has representatives from the different sectors of the tuna industry. However, the handliners are in uproar since their representative is closely associated with purse-seiners and not the handliners. Among other measures, the National Tuna Management Plan proposed MSY and TAC for different species based on 2002 catch estimates.

The sustainability of tuna production continues to be a heated debate, in the context of the lack of reliable time-series data for tuna production. It is expected that enhanced fish-landing facilities and the WCPFC would improve collection of data and allow for more substantial analysis in determining the tuna stock.

Soaring fuel prices and the expanded value-added tax (EVAT) have pushed up expenses, while revenues have failed to increase proportionally. This is further aggravated by the currently strong Philippine peso currency, which eventually depresses the value of US dollar revenues. Fuel subsidies have been proposed but the suggestion has been criticized as a solution that will only further aggravate the problem.

The push for sustaining livelihoods and greater access to foreign markets must be harmonized with the limits to the

allowable catch for different producers, and there should be no substantial increase in TAC from current catch estimates. With the additional production projected to come from foreign fishing vessels in the expansion work in GSCFPC, the adverse impact on local producers and consumers would have to be addressed.

The tuna industry contributes positively to the economy of southern Mindanao through the economic benefits associated with international trade, and the employment created by the production, processing and marketing of tuna. On the other hand, with frigate tuna being one of the cheapest fish products available to the Filipino people, sustainability measures must be put in place since this commodity is not included among the species being managed under a TAC regime.

The large volumes of tuna imported for canneries do not automatically translate into enhanced food security through availability of more affordable food. This is because more than 90 per cent of the production of the canneries is re-exported.

Detrimental role

On the contrary, the export of tuna products may have a more significant detrimental role in terms of availability of food. It is critical that all sectors participate in the formulation of policies at the national and regional levels so as to

incorporate sectoral issues and concerns. Also, representatives need to well appreciate the potential decline in tuna stocks and the need to contribute to the management of stocks.

Philippines

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