



channels. Few fisheries workers have the knowledge to operate efficiently in the business. This situation is a legacy of decades of protectionist policies which focused on maximizing employment and self-sufficiency regardless of efficiency. Moreover, the nation's inability to distribute and market fish on a national scale has resulted in relatively low consumption levels for a nation with such enormous marine resources. Consumption of processed fish and seafood products is less than 10 kilograms per capita.

Poor management of the fish stock has resulted in depleted resources in several parts of the country and there are serious concerns about the long-term future of the industry. Environmentally inappropriate fishing practices have led to an embargo on tuna imports into the United States and a consumer boycott of Mexican shrimp.

The government has recognized that this situation cannot continue; for that reason it has acted to develop the industry and to bring in modern fishery management techniques. The *Programa de Pesca y Acuicultura 1995-2000*, Fisheries and Aquaculture Development Program, is focused on improved infrastructure, better resource management techniques, the restoration of endangered fish stocks and the expansion of aquaculture.

As the industry develops and modernizes, there will be many opportunities for Canadian producers of seafood products. In spite of Mexico's relative self-sufficiency in these products, there are a number of important niches, including sardine, lobster, salt cod, and smoked salmon, where Canadian products can be competitive. There are also many openings for joint ventures between Canadian fish producers and their less well-developed counterparts in Mexico.

## THE MEXICAN FISHING INDUSTRY

Mexico's fishery resource includes more than 800 species of fish and other seafood. Fish of commercial significance include tuna, sardine, anchovy, red snapper, mullet and king mackerel. Crustaceans and mollusks include shrimp, lobster, abalone, oyster, clams and octopus. Total production in 1995 was about 1.4 million tonnes live. Of this, 1,034 thousand tonnes ended up as processed fish for human consumption, while 321 thousand tonnes and 42 thousand tonnes went to indirect consumption and industrial uses, respectively. By weight, the most important species produced were tuna, *mojarra*, shrimp and sardines, in that order. These four species accounted for about 35 percent of direct consumption in 1995, according to estimates of the *Secretaría del Medio Ambiente, Recursos Naturales y Pesca (Semarnap)*, Secretariat of Environment, Natural Resources and Fisheries. Other important categories included squid, oyster, skipjack and carp.

## REGIONAL DISTRIBUTION

For analytical purposes, the Mexican fishery is usually divided into four major areas:

- The North Pacific produces shrimp, tuna, lobster, sardine, anchovy, abalone, mussel, clam, sea urchin, sea cucumber and mackerel. This area produces close to 60 percent of Mexico's annual catch.
- The Central-South Pacific produces oyster, shark, tuna, swordfish, crawfish, shrimp, red snapper, king mackerel, catfish, octopus, snook and mullet. This area produces about 10 percent of the catch.
- The Gulf of Mexico and Caribbean produces shrimp, mullet, oyster,

dogfish, red and yellowtail snapper, mackerel, snook, lobster, crab and octopus. This area produces about 27 percent of the catch.

- Landlocked states have a largely undeveloped potential for aquaculture based on freshwater species, including *talipia*, blue gill, carp, black bass and frogs. This area produces about 3 percent of the catch.

## FISHING FLEET

In 1995, there were just under 75,000 fishing craft registered with the *Secretaría del Medio Ambiente, Recursos Naturales y Pesca (Semarnap)*, Secretariat of Environment, Natural Resources and Fisheries. Of these, more than 95 percent are small craft, of less than 10 tonnes, that are dedicated to coastal and inland cottage-industry fishing. Many of them are not even equipped with radios, much less modern navigational equipment, and an estimated 12 percent of the catch is by "informal" operators who do not report their production.

The fleet is almost equally divided between the Pacific, Gulf and Caribbean coasts, with about 4 percent of the craft operating in inland waters. Fewer than 3,300 boats are considered part of the high sea fleet, and they concentrate mainly on shrimp, tuna, sardine and anchovy. Shrimp boats alone make up about 69 percent of the high seas fleet. Another 26 percent specialized in scalefish, with the rest being tuna and sardine/anchovy boats. In 1996, there were 59 ports available to service the fishing industry, which included 28 kilometres of jetty.

## PROCESSING PLANTS

Mexico has more than 300 fish processing plants. Close to three-quarters are located on the Pacific Coast. The Mexican government has active