

Introduction

As with a number of other OECD countries, the fisheries sector has played an important role in the economic development of Mexico. While the contribution of the sector to the whole Mexican economy is relatively small in terms of GDP, it has a prominent position in regional terms with regard to economic, social and environmental issues. With a large aquatic biodiversity and valuable marine resources, it is important that Mexico has strong and enduring institutions, capable of coping with challenges faced by fishers and their communities. This is not an easy task since institutions are permanently confronted with preserving fisheries resources and at the same time as encouraging economic development and alleviating poverty. As observed by Bailey and Jentoft (1990), these are the “hard choices in fisheries development”.

Part III provides a review of a Mexico’s fisheries policies over the past fifteen years. The purpose of the review is to assess the effectiveness of the policies governing the fisheries sector and to identify areas in which the policies could be adjusted to more effectively meet the government’s objectives for the sector. The objectives of the *Programa de Acuacultura y Pesca* for the period 2001-2006 are contained in the broader *Plan Nacional de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación* (Programme on Agriculture, Livestock, Rural Development, Fisheries and Food) 2001-2006 which is under the authority of the *Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación* (SAGARPA). The agency within SAGARPA which is responsible for fisheries is the *Comisión Nacional de Acuacultura y Pesca* (CONAPESCA). The objectives of CONAPESCA under the *Programa de Acuacultura y Pesca* are:¹

- to use fisheries and aquaculture resources in a sustainable way;
- to promote the increase of the economic and social rent from fisheries and aquaculture;
- to grant and encourage legal certainty to fishing and aquaculture activities; and
- to promote support programmes and services to fishing and aquaculture activities (SAGARPA 2001)

The focus of the report is on those areas of government policy that have a direct impact on the sustainability and profitability of the sector. The effectiveness of government policies in supporting the overall objectives for the sector is assessed with reference to the impacts of policies on economic efficiency; resource sustainability; economic profitability; cost effectiveness; transparency; and community resilience. These criteria form the cornerstone of the shared principles of OECD countries as articulated at the annual meetings of the OECD Council at Ministerial Level (OECD, 2006). These can be summarised as a shared commitment to:

- achieve sustainable economic growth and employment, and rising standards of living in member countries while maintaining financial stability, so contributing to the development of the world economy;
- assist sound economic expansion in member countries and other countries in the process of economic development; and
- contribute to growth in world trade on a multilateral, non-discriminatory basis.

The scope covers Mexico's wild capture and aquaculture fisheries sectors, including the inland fisheries. This is a very diverse sector and covers a wide range of physical, production, marketing and institutional issues. The period covered in the review is 1990-2005, with the emphasis on the evolution of policies and the current policy framework.

The analysis has been undertaken in the OECD Secretariat and has been supported by a number of consultant reports that provided background on particular aspects of Mexico's fisheries policies. These consultant reports cover the evolution of the institutional framework, the status of the resource stocks, aquaculture sector issues, and rural development issues. In addition, OECD staff undertook consultations with a number of stakeholders in the Mexican fisheries and aquaculture sector, including officials in CONAPESCA and the National Fisheries Institute (INP), and producer organisations for the wild harvesting, aquaculture and processing sectors.

Part III is organised as follows. Chapter 9 provides an overview of the key characteristics of the Mexican fisheries sector including production, trade, fleet structure, employment and regional characteristics. The institutional framework governing the sector is reviewed in Chapter 10 and covers the evolution of management policy over the period 1990-2005, international engagement, and type and extent of financial support provided to the sector. The effectiveness of the management of wild capture sector is assessed in Chapter 11, focusing on the status of the key fish stocks, the effectiveness of the management instruments in place and the profitability of the sector. Chapter 12 provides a review of the aquaculture sector, a sector which is widely regarded as having very good prospects for growth. The links between rural development and fisheries policies are discussed in Chapter 13 where the role of the fisheries sector in alleviating rural poverty is assessed and policy challenges identified. The final part of the report brings together the conclusions from the analysis and provides a number of recommendations about the future direction of fisheries policy.

NOTE

1. Note that the National Fisheries Institute (*Instituto Nacional de la Pesca*, INP) also has objectives under the Sectoral Program. These are discussed in Chapter 10.

Chapter 9.

Background on the fisheries and aquaculture sector

Bordered by the Pacific Ocean, the Gulf of Mexico and the Caribbean Sea, Mexico has a rich biological diversity in its marine areas and inland waters. Along Mexico's coastline, tropical and subtropical marine currents favour the existence of a wide variety of fishery resources, many of which command high commercial values. The regions in which marine fishing takes place in Mexico are characterised by a high diversity in terms of bio-geographical factors and social aspects, reflecting strong regional differences. Figure 9.1 provides an overview of the marine biodiversity in different areas of the marine environment of Mexico. The coastal lagoons, reservoirs and ponds of the inland areas support important wild capture and aquaculture production activities.

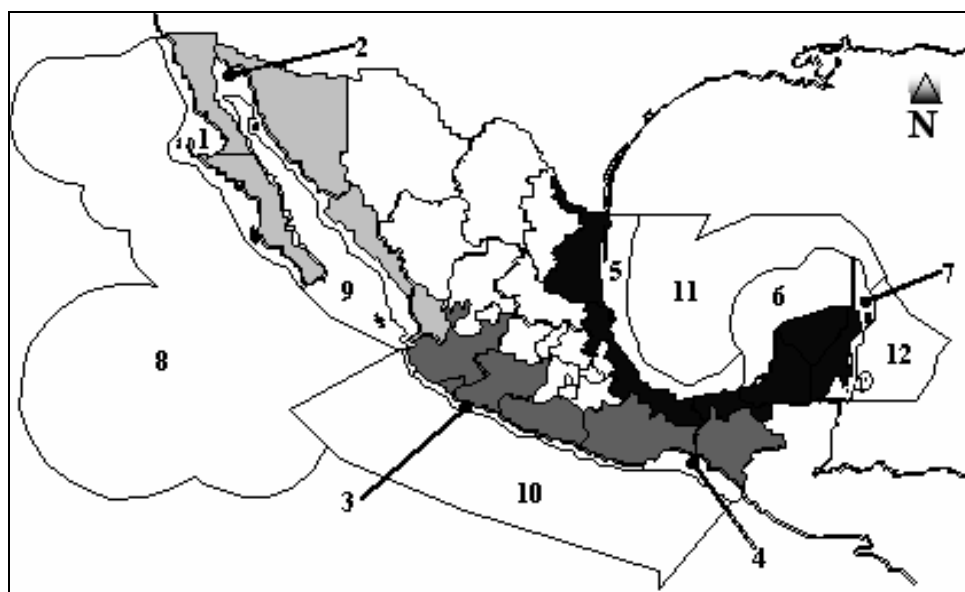
Mexico has one of the longest coastlines of any of the world's countries, stretching for 11 500 km (including its offshore islands), of which the Pacific accounts for 73.7% and the Gulf and the Caribbean for 26.3%. The Exclusive Economic Zone (EEZ) of Mexico covers almost 3 million square kilometres with a Continental Shelf measuring 358 000 km² (Table 9.1). Mexico has 2.9 million hectares of continental waters, of which 1.6 million hectares are lagoons and coastal waters that are highly suitable for aquacultural activities.

Table 9.1. Physical data for Mexico's fisheries sector

Region		Area	Proportion
		km ²	%
EEZ	Pacific Ocean	2 175 325	74
	Gulf of Mexico and Caribbean Sea	771 500	26
	Total	2 946 825	100
Continental Shelf	Pacific Ocean	158 190	44
	Gulf of Mexico and Caribbean Sea	199 605	56
	Total	357 795	100
Coastline	Pacific Ocean	8 475	79
	Gulf of Mexico and Caribbean Sea	3 294	21
	Total	10 769	100
Coastal Lagoons	Pacific Ocean	89 260	57
	Gulf of Mexico and Caribbean Sea	67 450	43
	Total	156 710	100

Source: CONAPESCA.

Figure 9.1. Biodiversity marine provinces in Mexico



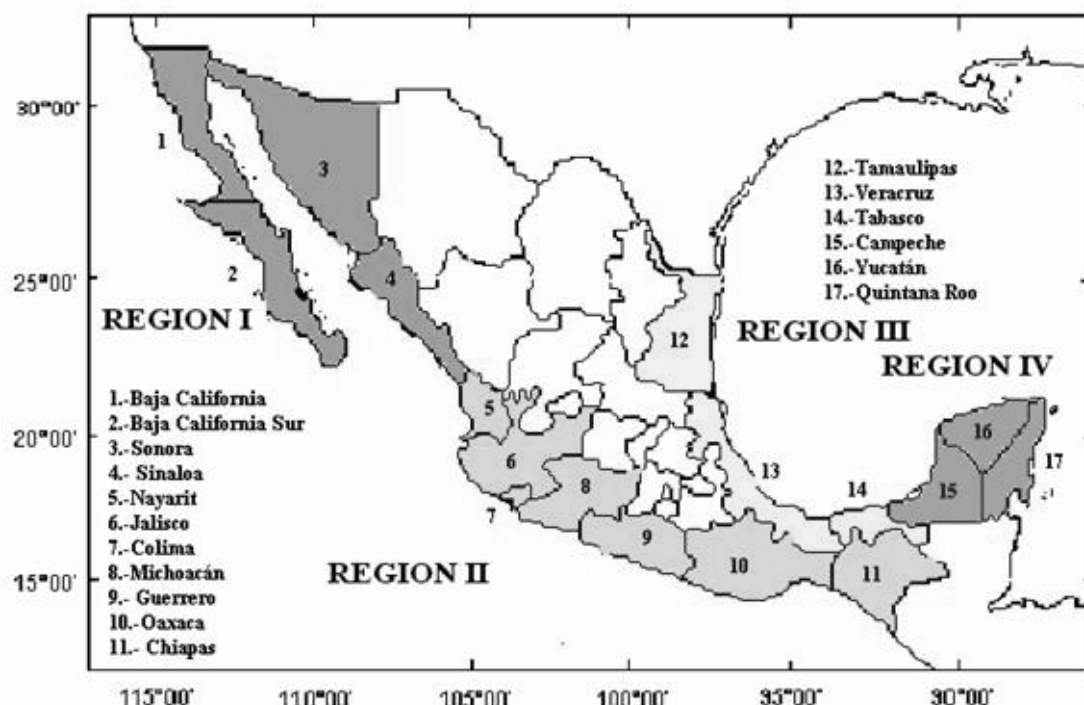
Area	Province	Key features
1	California	This is a transition region between temperate and tropical regimes. Reproduction areas of grey whales, sardines, anchovies, chub mackerel, skipjack, lobsters, abalone, and clams.
2	Coast of the Gulf of California	High biodiversity areas with high productivity. Very important areas for reproduction of a number of species, like sardines, squids, lobsters, turtles, and marine mammals. The eastern coast has very large and important shrimp nursery areas, within mangrove forests.
3	Central Pacific Coast	Important area for inshore fisheries, sport-fishing, and marine turtles nesting.
4	Panamic	High diversity for both species and habitats with notorious upwelling areas in the Gulf of Tehuantepec.
5	Coast of the western Gulf of Mexico	Large coastal lagoons which are important habitats for species caught by inshore fishers. These lagoons constitute important nurseries for shrimp and marine turtles nesting.
6	Campeche sound	Wide and extended continental shelf with large reserves of crude oil and with diverse and productive fisheries such as snappers, groupers, octopus, shrimp, and lobsters.
7	Caribbean coast	Reproduction areas for lobsters, octopus, queen conch, and reef fish. Important stocks of seagrass, mangrove forests, and a number of coral reefs.
8	Pacific North	Part of migratory paths of marine mammals, tunas, marlins, and large sharks
9	Gulf of California	Upwelling allows high productivity of small pelagic fish like sardine, northern anchovy, and giant squid.
10	South Pacific	The convergence of the north pacific gyre and the equatorial counter current gyre in this area makes it of high productivity for tuna, pelagic sharks, and sport-fishing.
11	Gulf of Mexico	Low diversity area but presenting large stocks of yellow fin tuna, blue fin tuna and sharks.
12	Caribbean Sea	High biodiversity but low productivity area for fisheries. Sport-fishing associated to tourism is rather frequent.

Source: Adapted from Arriaga-Cabrera *et al.* (1998).

In general discussion of the fisheries and aquaculture sector, it is useful to divide Mexico into four regions as these are very distinctive in their fisheries resource endowments, fishing and aquaculture activities, policy interests and poverty issues. The regions are also used in many aspects of fisheries research and management, as will be discussed later in the paper. The marine regions are given in Figure 9.2. The inland areas

of Mexico (Region V) also contain important fishing areas in terms of mojarra, carp, tilapia, etc., and are generally referred to as the inland fisheries.

Figure 9.2 Fishing regions



Source: CONAPESCA, from FAO Fisheries website.

Production trends

The commercially exploitable products in Mexico's territorial waters and continental seas can be classified into four groups:

- Pelagic or mass species: tuna, sardine, anchovy.
- Demersal species: red snapper, mullet, snapper, shark, dogfish, king mackerel, grunt.
- Crustaceans and molluscs: shrimp, lobster, abalone, oyster, clams, sea snail, octopus, sea cucumber, urchin.
- Farmed species: tilapia, carp, trout, catfish, crawfish.

Production levels in Mexico's fisheries sector have fluctuated significantly over the years (Figure 9.3). Until the 1970s, catches were consistently small, averaging around 200 000 tonnes a year.¹ The industrialisation of the fishery sector began in the early 1970s with rapid increases in the catches of sardine and anchovy and total production rose to just under 1.4 million tonnes in 1981. The collapse of the anchovetta fishery brought about by an El-Nino Southern Oscillation (ENSO) occurrence was the main factor behind a sudden decline in catches to around 1 million tonnes in 1983. Catches since then have fluctuated between 1.1 and 1.4 million tonnes a year, with an average annual growth rate of 1% for the period 1990-2004. Sardines and anchovy still account

for the largest proportion of wild capture production, followed by tuna, molluscs and shrimp (Figure 9.4).

Figure 9.3. Mexico's wild capture fisheries production

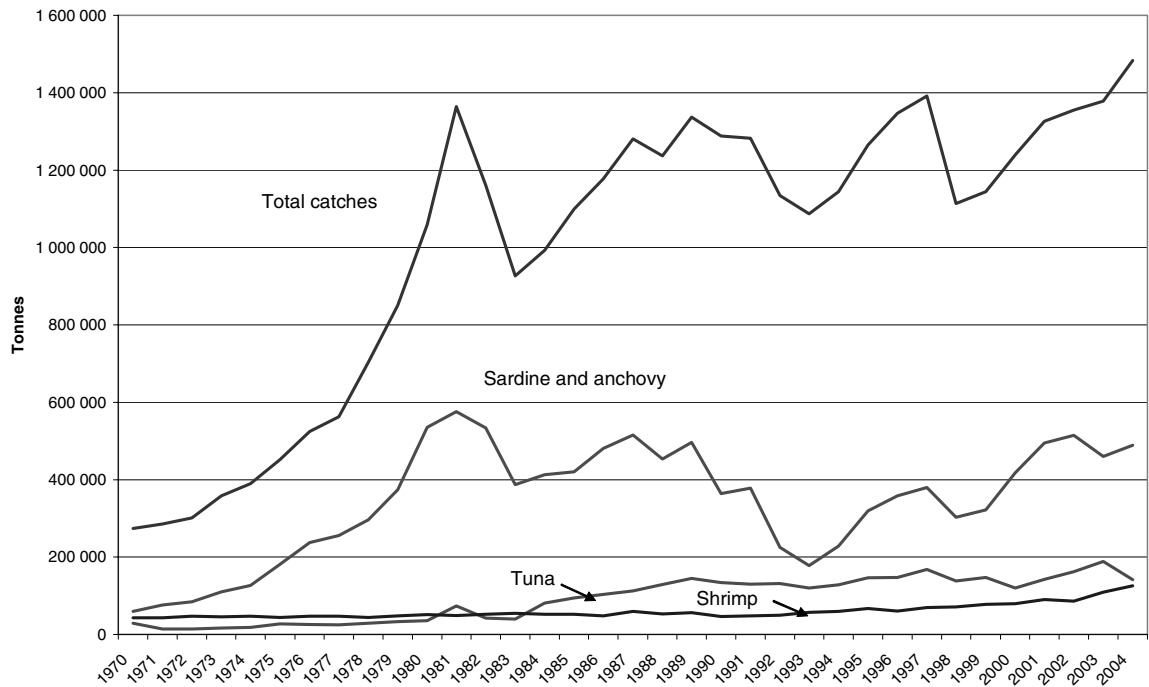


Figure 9.4. Wild capture production by species group

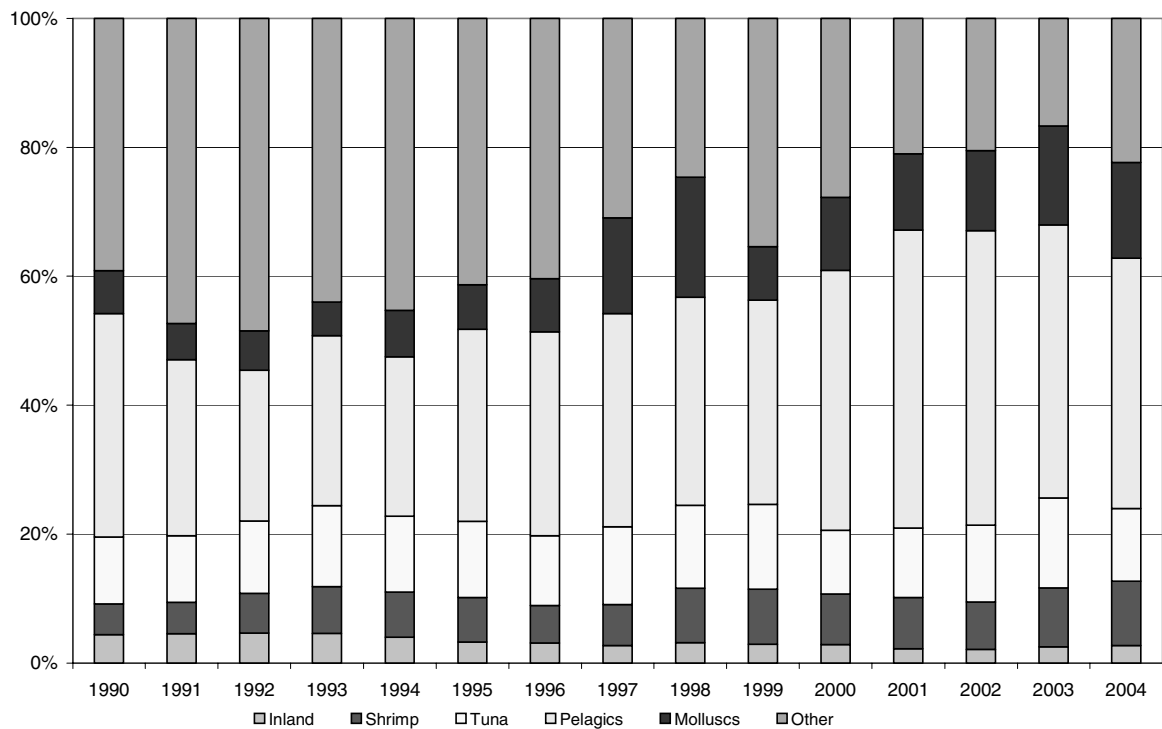
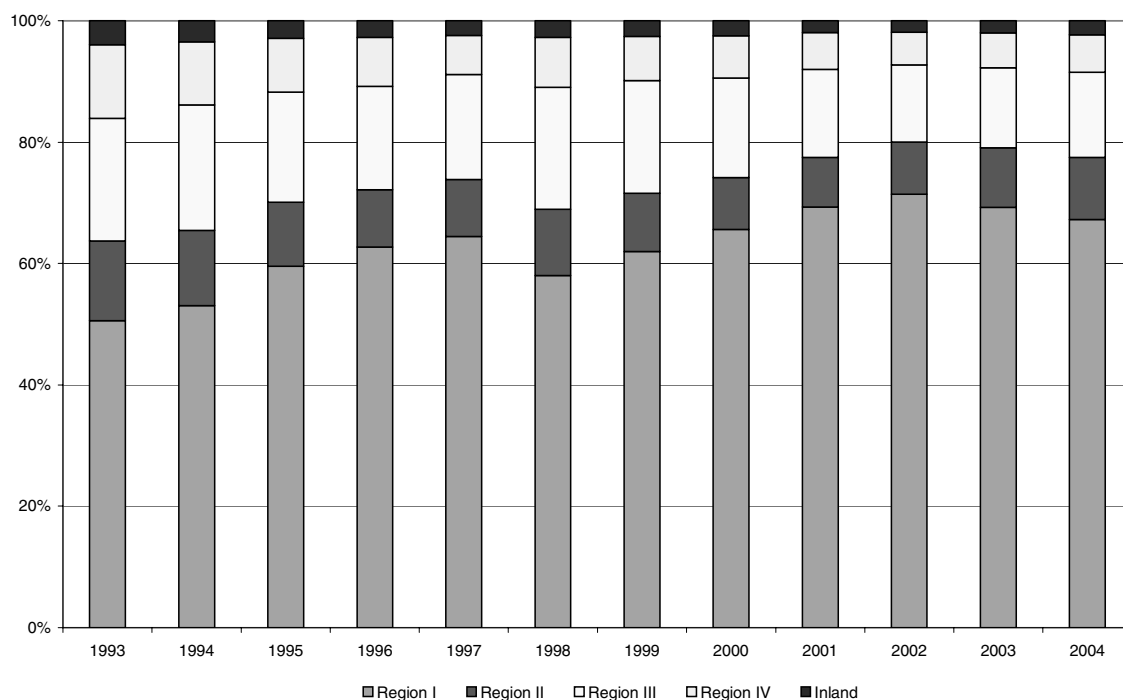


Figure 9.5. Location of catches, 1993 - 2004

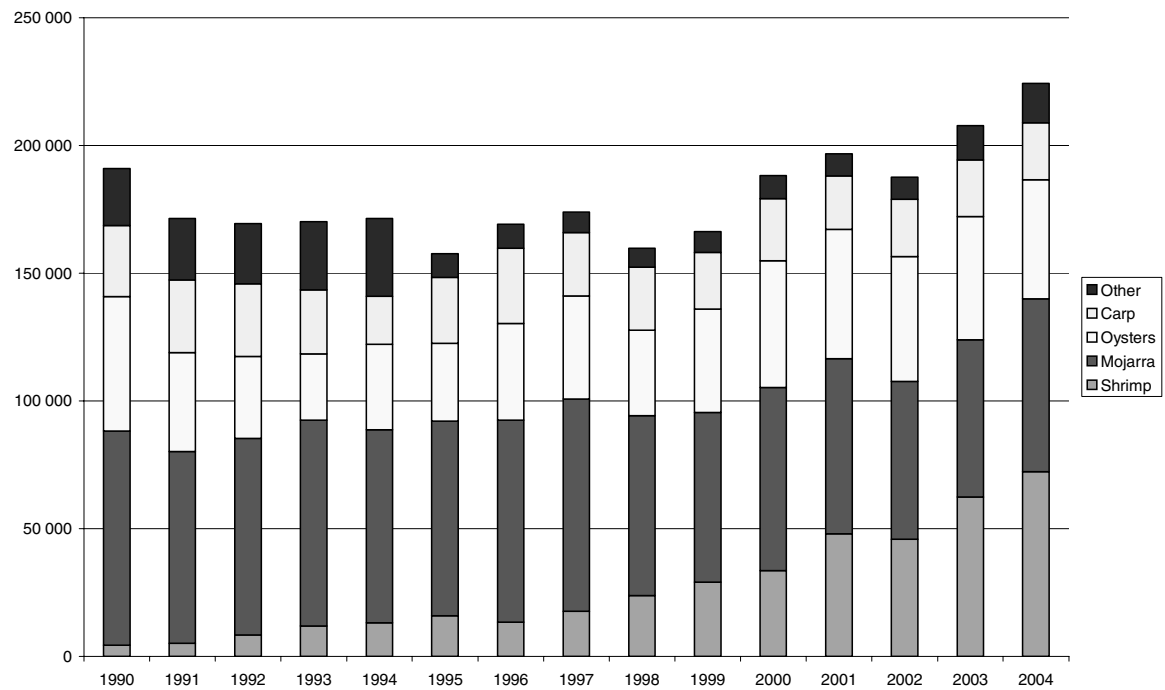
Source: CONAPESCA.

Catches are concentrated in the Pacific region, with the northern Pacific area (Region I) being the most productive (Figure 9.5). The share of production in the Gulf of Mexico and the Caribbean (Regions III and IV) has been declining since the early 1990s.

Aquaculture production has grown at a rate of 1.2% a year since 1990 and accounted for 12% of Mexico's total fish production in 2004. While this is relatively low compared to the average OECD proportion of 31%, the Mexican aquaculture sector is still in the early stages of development. The main species cultivated are shrimp, mojarra, oysters and carp, with shrimp accounting for 32% of total aquaculture production (Figure 9.6). The importance of shrimp aquaculture has been increasing rapidly with an average annual increase of 22% since 1990 (albeit from a low base), and there are high expectations amongst government and industry for the continued expansion of shrimp aquaculture.

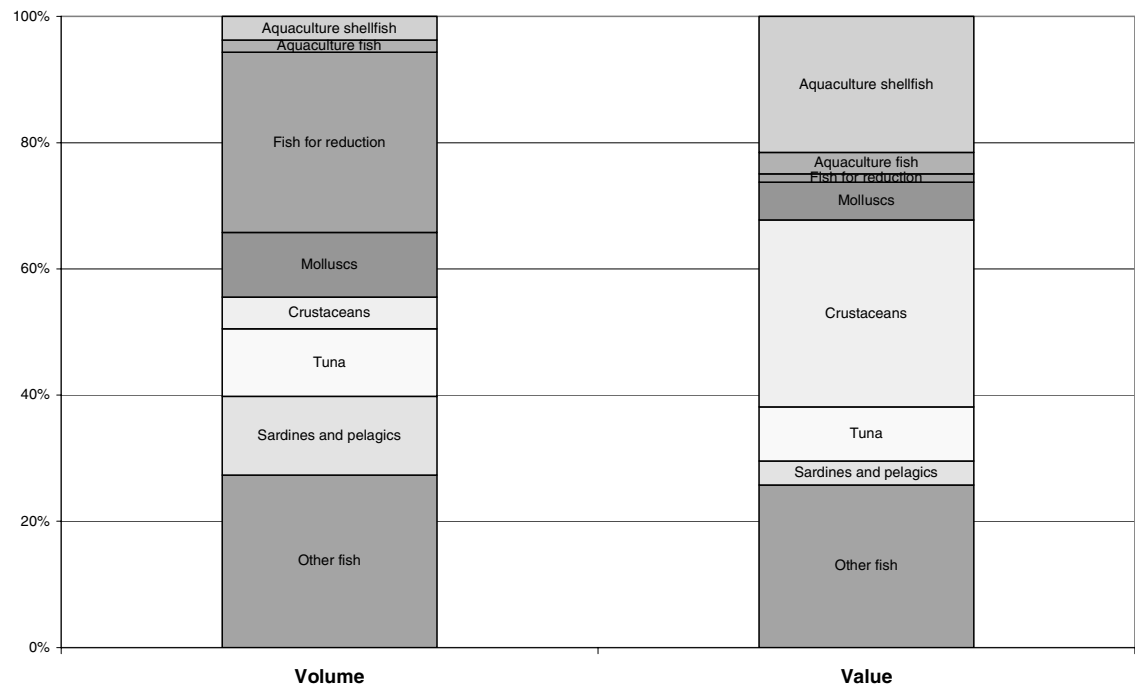
In terms of the value of production, Mexico's total fisheries and aquaculture production was valued at MXN 12.9 billion in 2001 at the point of first sale (the latest year for which data are available). As can be seen in Figure 9.7, sardines and fish for reduction account for a high proportion of the volume of production, but a relatively small proportion of the value of production. In contrast, the wild and aquaculture shrimp and crustacean sectors are relatively smaller in terms of volume but are much higher in terms of value.

Figure 9.6. Aquaculture production by species, 1990-2004



Source: CONAPESCA.

Figure 9.7. Volume and value shares of fisheries and aquaculture production, 2004

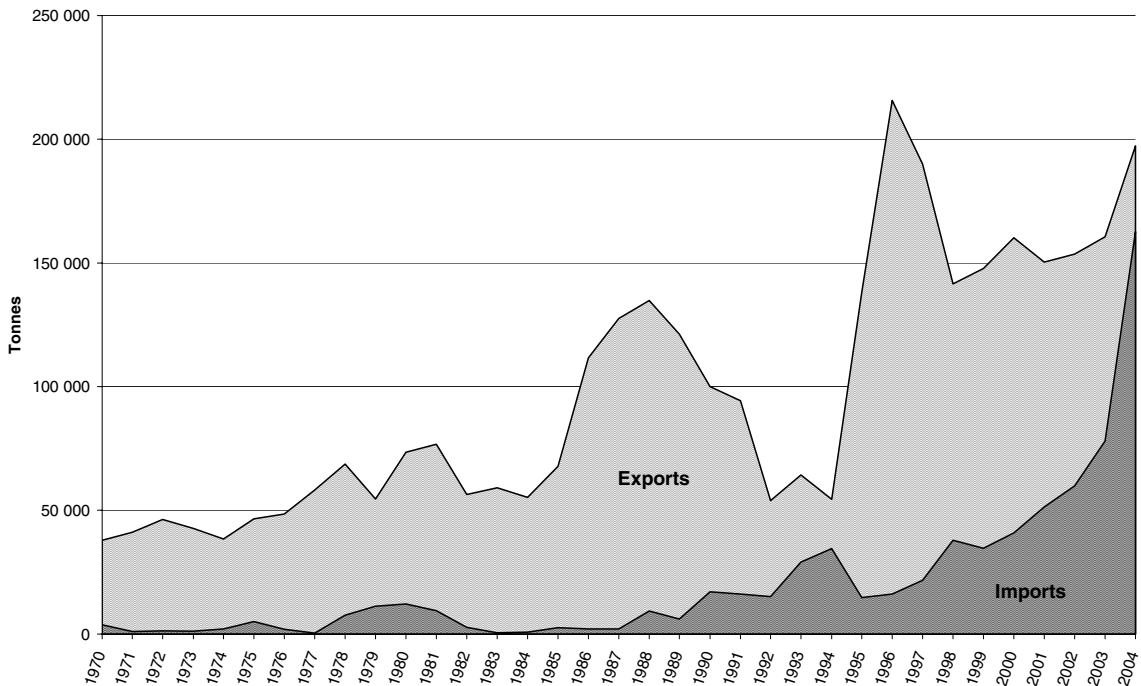


Source: CONAPESCA.

Markets and trade

Of the total catch in 2004, 77% was directed to human consumption (47% frozen and 30% canned), 23% for fish meal, and less than 1% for other industrial uses. About 14% of the total catch was exported, primarily to the United States (about 52% of the volume of exports), Japan (14%) and Spain (11%). Mexico has always been a net seafood exporter and the fish trade balance in terms of export/import ratio was around 2:1 in 2003 (Figure 9.8). From Figure 9.8, the steep decline in exports from 1988 to 1994 was largely a result of the anchovy stock crisis. The recovery in exports was due to the peso crisis in the mid-1990s. Over 60 % of the total value of exports in 2003 was accounted for by just two products, shrimp (47%) and tuna (16%) (Table 9.2). In the case of shrimp, the larger sizes are exported and the smaller shrimp remain for the domestic market for which the per capita consumption was 0.66 kg in 2002. However, since the price per kilo is between USD 12 and USD 18 wholesale, only a small fraction of the Mexican population can afford to eat shrimp on a regular basis. Instead, the most consumed products are canned tuna, canned sardines, fresh carp, and fresh tilapia, having these the lowest prices in the market. Domestic fish products consumption in Mexico was 12.4 kg per person per year in 2004, down from 15.8 kg per person per year in 1993².

Figure 9.8. Volume of exports and imports of fisheries products



Source: CONAPESCA.

Table 9.2. Exports and imports of fish and fish products, 2003

Product	Exports		Imports	
	Volume tonnes	Value MXN 000	Volume tonnes	Value MXN 000
Fresh fish	16 113	1 175 302	2 538	42 614
<i>Tuna</i>	5 544	796 566	10	1 054
Frozen fish	74 428	494 154	26 498	314 604
<i>Tuna</i>	29 797	261 451	32	2 068
<i>Sardines</i>	35 155	170 985	125	1 268
Fish fillets and other fish meat	1 814	134 005	20 237	632 441
Fish, cured and smoked	369	79 777	2 260	198 693
Crustaceans	29 219	3 700 608	7 624	369 916
<i>of which shrimp</i>	26 280	3 249 123	7 450	342 554
Molluscs	14 399	404 500	5 077	129 730
Seaweeds and other algae	18 539	6 863	1 761	30 814
Fish oils	2 179	9 145	834	9 756
Preserved fish	6 776	106 397	8 693	269 617
Preserved crustaceans	12 559	564 423	5 404	318 143
Fish meal	19 021	119 693	14 169	91 136
TOTAL	195 418	6 794 872	95 095	2 407 468

A number of fisheries have received or are seeking certification from the Marine Stewardship Council (MSC). The Baja California red rock lobster fishery in Baja received MSC accreditation in 2004. The fishery is currently exploited by about 500 fishers belonging to nine fishing co-operatives and spread over ten villages. Management involves a combination of limited entry, strict delineation of co-operatives fishing areas, and community-based self-regulatory measures (including area closures, minimum legal size, fishing gear restriction and protection of gravid females). The accreditation was sought by the Baja California Regional Federation of Fishing Co-Operative Societies which funded 80% of the cost of accreditation (the Federal government contributed the remaining 20%). Ninety percent of the fishery's products are exported (primarily to Asia, France and the United States). MSC accreditation is also being sought for the Gulf of California sardine fishery. In this case, the industry is providing 40% of the funding while the Federal government is providing the balance.

Mexico has signed free trade agreements with different countries and regions and the fisheries sector has been an important element of the negotiations. Those agreements are with United States and Canada (NAFTA); The European Union; Colombia and Venezuela in the Group of Three³; Japan; Costa Rica, Nicaragua and with the Northern Triangle (Guatemala, Honduras and el Salvador); Chile; and with the European Free Trade Association (EFTA) composed of Switzerland, Norway, Liechtenstein and Iceland.

Fleet structure

The Mexican fleet can be broadly divided into small- and large-scale boats (Table 9.3). Small-scale boats (locally known as “pangas”) are used for inshore fishing by the artisanal fishers and have a maximum of one tonne of carrying capacity and are generally less than 10 m in length. They are the most numerous type of boat in Mexico with 102 807 vessels being reported by CONAPESCA in official statistics (Figure 9.9). Of these, 56 412 vessels are reported as being on the Pacific coast and 43 392 vessels in

the Gulf of Mexico and Caribbean Sea coast in 2003. In reality, however, there is no clear understanding of the exact number of small-scale vessels in Mexico. This is evident from Figure 9.9 where there are clearly concerns over the validity of the data from 1990 onwards. The official statistics on the number of small scale vessels have not been adjusted since 1997, following a 40% increase in the number of estimated vessels from 1996. A direct result of the increasing number of small scale vessels, improvements in the power of their out-board engines, and an increase in the number of small-scale fishers is that the catch per person employed in the fisheries sector has dropped from 12 tonnes per person per year in 1980 to about six tonnes in 2001⁴. The uncontrolled and uncharted expansion of the small-scale fleet is a major issue for fisheries policy and will be addressed later in this report

The large-scale fleet has fluctuated in size over the last two decades (Figure 9.10). In 2005, this segment of the fleet consisted of 2 182 shrimp trawlers (1 551 in the Pacific and 631 in the Gulf of Mexico), 104 tuna purse seiners in the Pacific, 32 tuna long-liners in the Gulf of Mexico, and 1 121 smaller boats. The latter are 98 small purse seiners in the Pacific area, which catch sardines, pilchards and anchovies, and 1 023 diverse boats devoted to grouper, sharks, snappers and other fisheries (218 in the Pacific and 805 in the Gulf of Mexico) (Table 9.4).

The tuna fleet is composed of two kinds of vessels: the purse seiners fishing in the Pacific waters, and long-liners fishing in the Gulf of Mexico. Most of the purse seiners weigh more than 750 tonnes while the long-liners weight between 20 and 400 tonnes. The Pacific shrimp trawlers weigh more than 80 tonnes, while the smaller (between 10-80 tonnes) are more common in the Gulf of Mexico. Sardine purse seiners are very similar to shrimp trawlers in weight and length.

Table 9.3. Number of vessels by type

	1970	1980	1990	2000	2003	2004	2005
Shrimp trawlers	1 375	2 713	2 285	2 383	2 409	2 411	2 182
Tuna purse seiners and long-liners	11	51	85	123	131	134	136
Other boats (20-60 tonnes)	179	767	796	1 060	1 094	1 097	1 121
Small boats (less than 10 m in length)	14 881	32 510	71 406	102 807	102 807	102 807	102 807
Total	16 446	33 328	72 287	106 373	106 441	106 449	106 246

Source: CONAPESCA.

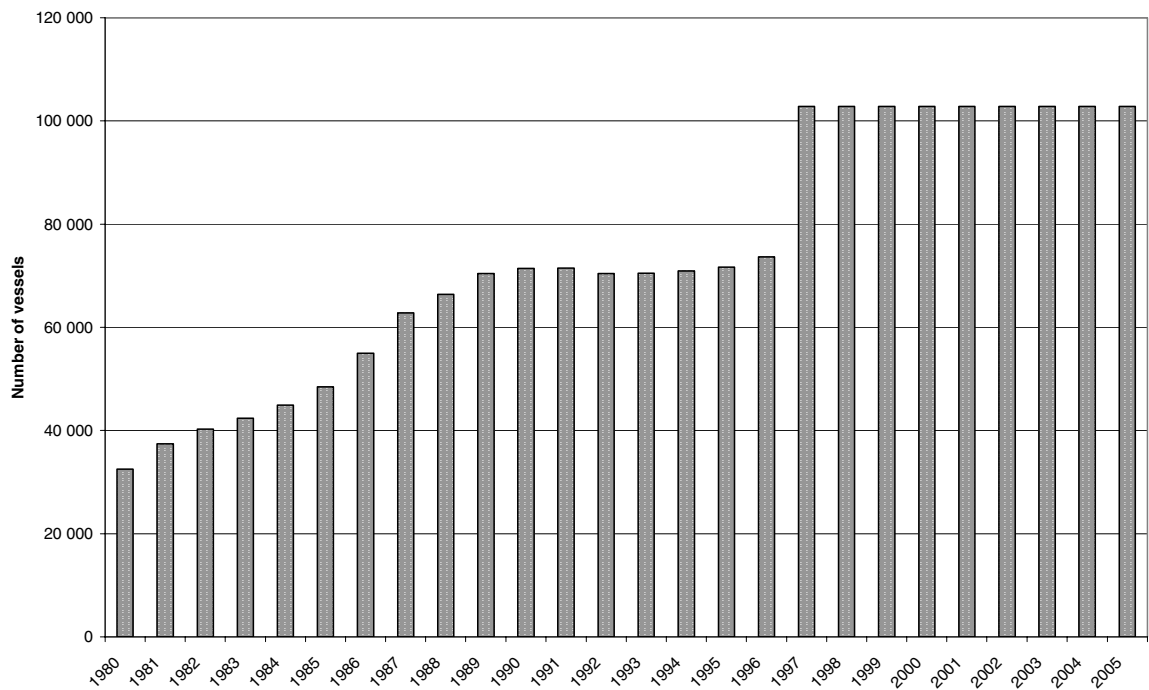
Table 9.4. Number of vessels by type and location, 2005

Region	Shrimp trawlers	Tuna purse seiners and long-liners	Sardine	Other	Small scale ^a
Region I (NW Pacific)	1 369	98	98	189	24 304
Region II (SW Pacific)	182	6	0	29	32 108
Region III (NE Gulf and Caribbean)	329	22	0	106	32 161
Region IV (SE Gulf and Caribbean)	302	10	0	699	11 231
Inland waters	0	0	0	0	3 003
Total	2 182	136	98	1 023	106 246

a. 1997 data.

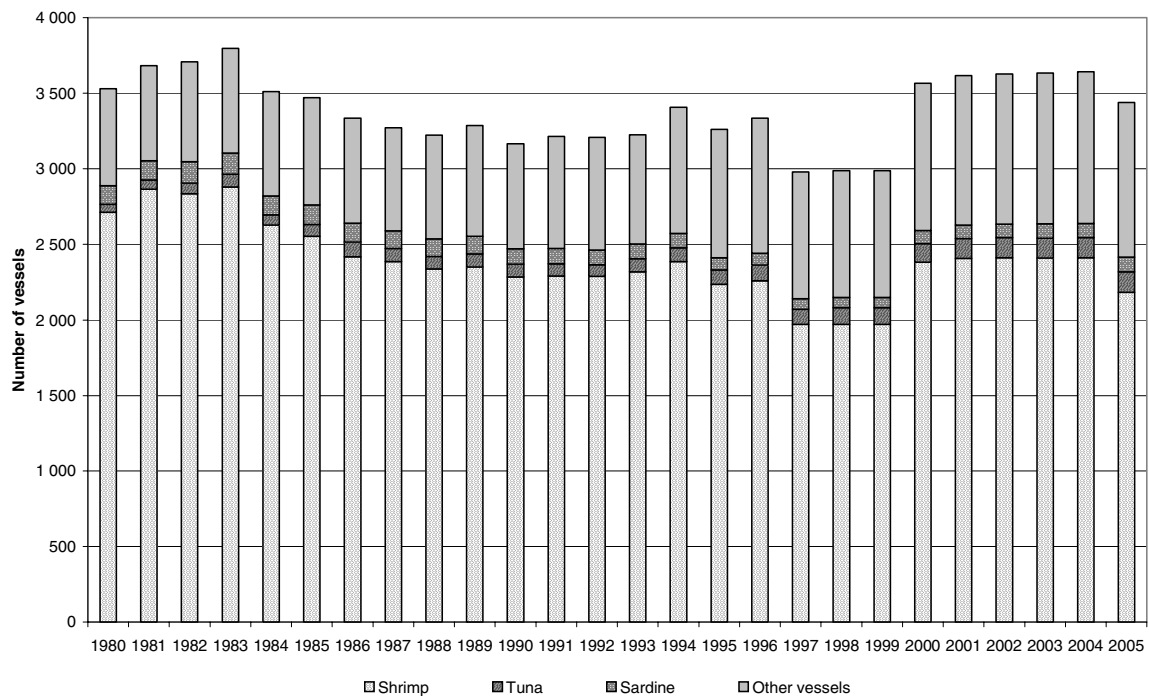
Source: CONAPESCA.

Figure 9.9. Reported number of small scale vessels in Mexico, 1980-2005



Source: CONAPESCA.

Figure 9.10. Structure of large-scale fleet, 1980-2005



Source: CONAPESCA.

The number of boats of the large-scale fleet has not dramatically increased in the last decades in comparison to small-scale boats. However, the large-scale fleet fishing effort has been significantly augmented by improvements in capture efficiency, the adoption of new fishing gear, new devices for navigating, larger carrying capacity, multiplication in the number of fishing days and trips, and movements among fishing grounds. These trends have been more frequently observed for the tuna and shrimp fleets. For example, in 1995 the federal government set up a programme for the renewal of the shrimp fleet, although there was limited funding made available in the programme. Trawlers were ageing as no substantial investment were devoted to its improvement since “La Cooperativización” (Chapter 10), when the whole fleet was transferred from the private sector to the fishers’ cooperatives in 1981-1982. Nor was there substantial reinvestment when the fleet was resold to the private sector ten years after. Private fishers asked the government for help in the 1990s and, although the number of trawlers has not changed for years, many of these have been replaced by newer and better equipped vessels. Fernández-Méndez (2001b) and Ramírez *et al.* (2001) note that, even when the number of trawlers in the Gulf of Mexico fleet has slightly diminished, the levels of fishing mortality of shrimp stocks have been kept the same over the years and, due to recruitment over-fishing, catches have steadily declined.

Employment

Employment in the sector has increased by around 1% a year since 1990, reaching 297 422 persons employed in 2004 (Table 9.5). As expected due to the concentration of vessels, most of the employment is on the Pacific coast where Region I accounted for 30% of total employment and Region II for 25%. The coastal marine fisheries on both coasts accounted for almost 60% of the total employment.

Table 9.5. Employment by sector and region, 2004

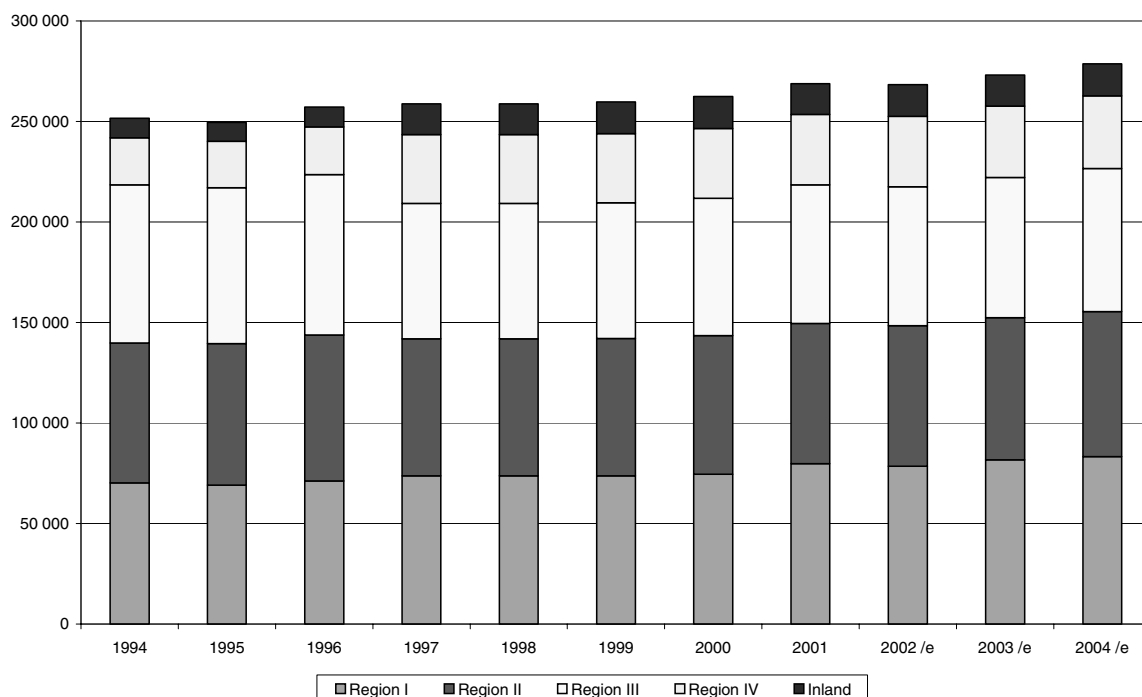
Sector	Total number
Harvest sector	255 248
Region I	67 864
Region II	69 822
Region III	70 029
Region IV	35 985
Inland fisheries	11 549
Aquaculture	23 497
Region I	15 512
Region II	2 264
Region III	1 175
Region IV	149
Inland fisheries	4 396
Processing	18 677
Total	297 422

Source: CONAPESCA.

Figure 9.11 provides a profile of employment in the fisheries and aquaculture sector from 1994 to 2004. This refers to registered workers and does not include a number of artisanal fishers, the magnitude of which is not known. Note also that the last two years are CONAPESCA estimates. As with the vessel data for the small-scale fleet, this reflects

a lack of solid statistics and a high degree of uncertainty about the size of the artisanal sector. The overall registered employment has been growing at an average annual rate of 1%, with Region IV (South Gulf of Mexico and Caribbean) and the inland water areas experiencing the strongest growth of 4.4% and 5.2% a year, respectively. Registered employment in Region III (North Gulf of Mexico) has declined at an average annual rate of 1%.

Figure 9.11. Number of registered employees in fisheries and aquaculture (excluding processing), by region



e. Estimates

Source: CONAPESCA.

Regional characteristics

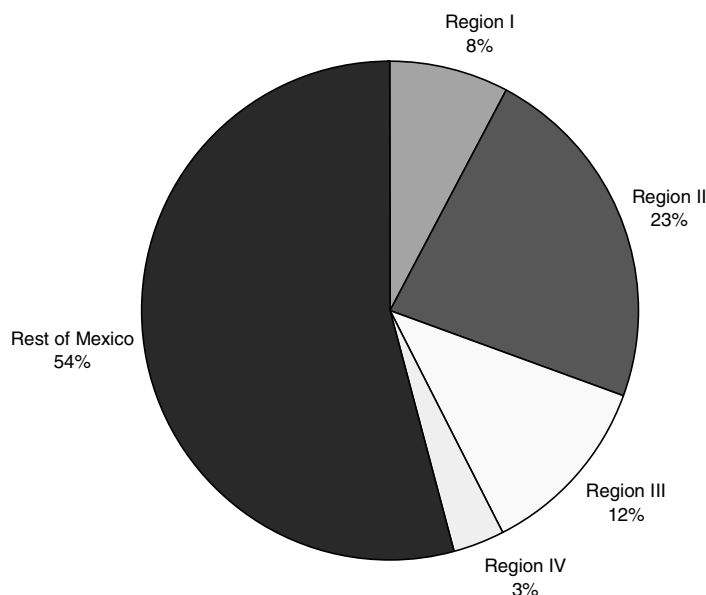
While the contribution of the fisheries sector to Mexican Gross Domestic Product (GDP) is only 0.15%, the importance of the fishery industry in Mexico is rather regional. In fact, there are certain regions where fisheries activities are more significant in terms of economic and social issues, most notably in NW Mexico (Table 9.6). For example, states where fisheries have the highest relevance in terms of its participation to the state GDP in 1996⁵ was 5% to Baja California Sur's GDP, 4% to Sinaloa's GDP, and 2% to Sonora's GDP. In fact, just three states (out of 17 coastal states) comprised 51% of the fisheries GDP in 1996. These are Sinaloa and Sonora in the Pacific coast and Veracruz in the Gulf of Mexico. The participation of the fisheries sector to the state GDP almost doubled in both Sinaloa and Sonora states (NW Mexico) during the period 1993-1996, while for Tamaulipas and Campeche (Gulf of Mexico) their contribution slightly diminished (INEGI, 1997). In addition, the coastal states account for 46% of the total Mexican population, with the southern Mexican Pacific region accounting for the largest proportion (Figure 9.12).

Table 9.6. Relative contribution of selected fisheries to indicators by region, 2004 (%)

Contribution to total	North Mexican Pacific (Region I)	South Mexican Pacific (Region II)	Gulf of Mexico and Caribbean Sea (Regions III and IV)
Fisheries GDP (1996 data)	39.5	14.5	42.1
Catch volume	70.7	8.4	18.9
Catch value	56.9	9.9	30.3
Small-scale boats	28.8	27.7	43.5
Large-scale boats	51.1	5.8	43.1
Jobs in fisheries sector	35.9	23.2	40.8
Aquaculture production ^a	44.0	41.7	14.2

a. Includes freshwater, brackish and marine waters. Totals may not add to 100% because inland states are not included.

Source: INEGI (1997), CONAPESCA.

Figure 9.12. Shares of coastal state population, 2000

Source: INEGI.

States surrounding the Gulf of California contribute to about 71% of the total catch volume and 57% of total value. In the Gulf of Mexico catches amount to almost 19% of volume but have a share of 30% in value. This is explained in terms of the catch composition. Small pelagic fish (*i.e.* sardine, pilchard and anchovy) fisheries, which are low-valued species, are caught almost exclusively in the north Mexican Pacific. In contrast, highest values are made up in states where shrimp fisheries take place: Sonora, Sinaloa and Nayarit in the Pacific, and Tamaulipas and Campeche in the Gulf of Mexico.

Investment and therefore income from fisheries are strongly regionalised. For example, industrial fisheries do not take place in the south Mexican Pacific region, a fact that is reflected by the small proportion of large-scale boats (less than 6%). In contrast, a

little more than one fifth of the small-scale fleet is located in the south Mexican Pacific. It is interesting to note that standardising the number of small-scale boats by the coast line, the ratio for the north Mexican Pacific is 4.5 boats/km, for the south Mexican Pacific is 13.4 boats/km and for the Gulf of Mexico and Caribbean Sea is 13.9 boats/km. In fact, most fishers in the south Mexican Pacific belong to poor communities in the poorest regions of Mexico, where electricity and running water services are not provided. Furthermore, income is unevenly distributed as well. Nadal (1996) found that small-scale fisheries derive less than 3% of the total fisheries income. Indeed, fisheries income in the north Mexican Pacific is five-fold higher than in the south Mexican Pacific⁶. Although fisheries are less industrialised in the south Pacific, it is the fleet interaction (*i.e.* inshore-offshore) elsewhere, which brings most of the conflicts in Mexican fisheries.

NOTES

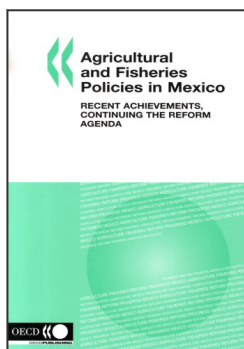
1. Note that all volumes are given in terms of landed weight, not live weight.
2. Includes both direct and indirect consumption.
3. Note that Venezuela left the Group of Three in 2006.
4. www.fao.org/countryprofiles: last accessed on 20 March 2006.
5. Latest available figures per state (INEGI, 1997).
6. www.fao.org/countryprofiles: last accessed on 20 March 2006.

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