

## JAPAN'S TSUNAMI

### Devastating Tsunami Drives Away Fish

On the day of the tsunami that hit Japan on 11 March 2011, Mexican fishermen reported a stellar fishing day and it is being reported that the tsunami drove fish in their direction.

Thousands of sardines, anchovies, striped bass and mackerel surged along the coast of Acapulco, packed so tightly that they looked like an oil slick from above.

Delighted fishermen rushed out in wooden motor boats to scoop the fish up in buckets.

The fishermen attributed the strange phenomenon to the

unusual currents unleashed by the tsunami, but experts couldn't be sure.

"It would fall into that category where you would love to make the connection, but who knows?" said Rich Briggs, a geologist with the US Geological Survey.

Sadly, the tsunami has wiped out fishing harbours and ports—and not just in Japan.

In Japan, the port of Minamisanriku was destroyed and Misawa was devastated. The fishing hub Ofunato was also badly hit, as was the fishing town of Rikuzentakata, and Hakodate.

It has been reported that the commercial fishing harbour of Crescent City in California was destroyed. The town was still recovering from a tsunami in 1964. 53 vessels were damaged, including 15 that sank, said Alexia Retallack, a spokeswoman for the state Department of Fish and Game.

The damage in Santa Cruz Harbour is estimated at nearly £10 million. The harbour is housing 58 commercial fishing vessels that were not able to leave the harbour, said Lisa Ekers, director of the Santa Cruz Port District.

Meanwhile, the explosions and leaks from the Fukushima nuclear plant have worried consumers about whether it is safe to eat Japanese fish, for fear of radiation poisoning.

[www.worldfishing.net/news101/japanese-tsunami-hits-fisheries](http://www.worldfishing.net/news101/japanese-tsunami-hits-fisheries)

#### BOOKSHELF

**Johannes, R.E., 1981. Words of the Lagoon: Fishing and Marine Lore in the Palau District of Micronesia. University of California Press, California.**

Words of the Lagoon" is an account of the pioneering work of a marine biologist to discover, test and record the knowledge possessed by native fishermen of the Palau islands of Micronesia.

When Palauans fish, land-based protocol is suspended. Harsh criticism or 'words of the lagoon'—*teko i l'chei*—may be hurled by man or boy of any rank at anyone, chief included, whose efforts do not measure up on the fishing grounds. No one, irrespective of rank, may express offence at being scolded under such conditions. The Palauans' sensitivity to marine ecology and their centuries-old use of conservation methods employed only recently by industrialized societies are meshed in the traditional values of the culture that gives a special place to 'Words of the Lagoon'.

#### VERBATIM

I was drunk on as addictive a thing as was ever poured from a bottle. I sang to myself, The sea, the sea, the crazy old black sea.

—DIANE WILSON  
IN "AN UNREASONABLE WOMAN"

#### ORGANIZATIONAL PROFILE

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### The African Confederation of Small-scale Fisheries Professional Organizations

Despite its economic, social and cultural importance in Africa, small-scale fisheries remain the poor relation of development policies. The looting of marine resources through illegal practices is now jeopardizing the survival of fishing communities, and is one of the greatest threats to future generations.

National organizations grouping small-scale fishing professionals are being established in various African countries, but alone, they are unable to stop the scourge and influence fisheries policies.

Aware of the urgency of solving these issues, after several years of dialogue between West African small-scale professional organizations from Mauritania, Senegal and Guinea, the African Confederation of Small-scale Fisheries Professional Organizations (CAOPA) or the *Confédération africaine des Organisations professionnelles de la Pêche artisanale* was launched in March 2010, in Banjul, Gambia. Founding members included men and

women representing the national small-scale fisheries professional organizations of Senegal, Gambia, Mauritania, Guinea-Bissau, Guinea, Cape Verde, Sierra Leone, Liberia, Togo and Ivory Coast.

CAOPA's vision is "to develop an African small-scale fisheries organizations' dynamic". Its main objectives are "to add value to the fish resources they live from, in order to ensure the well-being of their communities, and to get involved in the design and implementation of fisheries policies."

CAOPA is there to "defend the material and moral interests of its members; to have their

improve women's working conditions and involvement in decisionmaking."

First and foremost, CAOPA wants to become and remain "a force of proposal for sustainable fisheries in the face of States and all other national and international development partners".

In September 2010, CAOPA members participated as observers to the first Conference of African Fisheries and Aquaculture Ministers, organized by the New Partnership for Africa's Development (NEPAD), in Banjul. In 2011, these efforts were pursued with the participation of a CAOPA delegation to the FAO Committee on Fisheries, where they participated in daily briefings organized by the NEPAD for African delegations. CAOPA also participated in the World Social Forum in Dakar, co-organizing an event on "Fisheries and Food Security" and presenting their views on foreign direct investments in fisheries, in a meeting looking at 'sea grabbing' issues.



legitimacy to fulfill this role recognized by governments as well as by national and international institutions; to be involved in defining policies for responsible and sustainable fisheries, which contribute to fighting poverty, but also to

# The State of World Fisheries and Aquaculture

According to the “The State of World Fisheries and Aquaculture 2010” (SOFIA), capture fisheries and aquaculture supplied the world with about 142 mn tonnes of fish in 2008. Of this, 115 mn tonnes were used as human food, providing an estimated apparent per capita supply of about 17 kg (live-weight equivalent), which is an all-time high.

Aquaculture accounted for 46 per cent of total food fish supply, a slightly lower proportion than reported in SOFIA 2008, owing to a major downward revision of aquaculture and capture-fishery production statistics by China, but representing a continuing increase from 43 per cent in 2006.

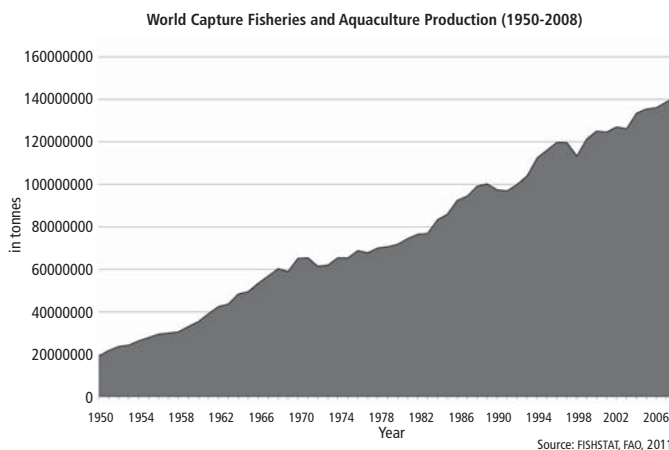
Outside China, per capita supply has remained fairly static in recent years as growth in supply from aquaculture has offset a small decline in capture-fishery production and a rising population. In 2008, per capita food fish supply was estimated at 13.7 kg, if data for China are excluded.

In 2007, fish accounted for 15.7 per cent of the global population’s intake of animal protein and 6.1 per cent of all protein consumed. Globally, fish provides more than 1.5 bn people with almost 20 per cent of their average per capita intake of animal protein, and 3 bn people with at least 15 per cent of such protein. In 2007, the average annual per capita apparent fish supply in developing countries was 15.1 kg, and 14.4 kg in low-income food-deficit countries (LIFDCs).

In LIFDCs, which have a relatively low consumption of animal protein, the contribution of fish to total animal protein intake was significant—at 20.1 per cent—and is probably higher than that indicated by official statistics in view of the under-recorded contribution of small-scale and subsistence fisheries.

China remains by far the largest fish-producing country, with production of

47.5 mn tonnes in 2008 (32.7 mn and 14.8 mn tonnes from aquaculture and capture fisheries, respectively). These figures were derived using a revised statistical methodology adopted by China in 2008 for all aquaculture and capture-fishery production statistics and applied to statistics for 2006 onwards. The revision



was based on the outcome of China’s 2006 National Agricultural Census, which contained questions on fish production for the first time, as well as on results from various pilot sample surveys, most of which were conducted in collaboration with FAO.

Global capture-fisheries production in 2008 was about 90 mn tonnes, with an estimated first-sale value of US\$93.9 bn, comprising about 80 mn tonnes from marine waters and a record 10 mn tonnes from inland waters. In 2008, China, Peru and Indonesia were the top producing countries. China remained by far the global leader with production of about 15 mn tonnes.

While aquaculture production (excluding aquatic plants) was less than one mn tonnes per year in the early 1950s, production in 2008 was 52.5 mn tonnes, with a value of US\$98.4 bn. Aquatic plant production by aquaculture in 2008 was 15.8 mn tonnes (live-weight equivalent), with a value of US\$7.4 bn, representing an average annual growth rate

in terms of weight of almost eight per cent since 1970.

The fish sector is a source of income and livelihood for millions of people around the world. Employment in fisheries and aquaculture has grown substantially in the last three decades, with an average rate of increase of 3.6 per cent per year since 1980. It is estimated

that, in 2008, 44.9 mn people were directly engaged, full-time or, more frequently, part-time, in capture fisheries or in aquaculture, and at least 12 per cent of these were women. This number represents a 167 per cent increase, compared with the 16.7 mn people in 1980. It is also estimated that, for each person employed in capture fisheries and aquaculture production, about three jobs are produced in secondary activities, including post-harvest, for a total of more than 180 mn jobs in the whole of the fish industry.

Moreover, on average, each jobholder provides for three dependants or family members. Thus, the primary and secondary sectors support the livelihoods of a total of about 540 mn people, or 8 per cent of the world population. Employment in the fisheries sector has grown faster than the world’s population. In 2008, 85.5 per cent of fishers and fish farmers were in Asia, followed by Africa (9.3 per cent), Latin America and the Caribbean (2.9 per cent), Europe (1.4 per cent), North America (0.7 per cent)

and Oceania (0.1 per cent).

China is the country with the highest number of fishers and fish farmers, representing nearly one-third of the world total. In 2008, 13.3 mn people were employed as fishers and fish farmers in China, of whom 8.5 mn people were full time. In 2008, other countries with a relatively high number of fishers and fish farmers were India and Indonesia.

Analyses indicate that the global fishing fleet is made up of about 4.3 mn vessels and that this figure has not increased substantially from an FAO estimate of a decade ago. About 59 per cent of these vessels are powered by engines. The remaining 41 per cent are traditional craft of various types, operated by sails and oars, concentrated primarily in Asia (77 per cent) and Africa (20 per cent). These unmotorized boats are engaged in fishing operations, usually inshore or on inland waters. The estimated proportion of non-powered boats is about four per cent lower than that obtained in 1998.

Of the total number of fishing vessels powered by engines, the vast majority (75 per cent) were reported from Asia and the rest mostly from Latin America and the Caribbean (eight per cent), Africa (seven per cent) and Europe (four per cent). The proportion of countries where the number of vessels either decreased or remained the same (35 per cent) was greater than that of those where it increased (29 per cent). In Europe, 53 per cent of the countries decreased their fleet and only 19 per cent of countries increased it.

Most of the stocks of the top 10 species, which account in total for about 30 per cent of the world marine capture-fisheries production in terms of quantity, are fully exploited. The two main stocks of anchoveta (*Engraulis*

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SOFIA 2010...contd

ringens) in the Southeast Pacific and those of Alaska pollock (*Theragra chalcogramma*) in the North Pacific and blue whiting (*Micromesistius poutassou*) in the Atlantic are fully exploited. Several Atlantic herring (*Clupea harengus*) stocks are fully exploited, but some are depleted. Japanese anchovy (*Engraulis japonicus*) in the Northwest Pacific and Chilean jack mackerel (*Trachurus murphyi*) in the Southeast Pacific are considered to be fully exploited. Some limited possibilities for expansion may exist for a few stocks of chub mackerel (*Scomber japonicus*), which are moderately exploited in the Eastern Pacific, while the stock in the Northwest Pacific was estimated to be recovering. In 2008, the largehead hairtail (*Trichiurus lepturus*) was estimated to be overexploited in the main fishing area in the Northwest Pacific. Of the 23 tuna stocks, most are more or less fully exploited (possibly up to 60 per cent), some are overexploited or depleted (possibly up to 35 per cent) and only a few appear to be underexploited (mainly skipjack).

## FLASHBACK

### Editorial from SAMUDRA Report No. 1

Here, at last, in the spring of 1988, is the English edition of our little journal—born to link all those who feel concerned for the fate of fishworkers around the world: small-scale fishermen, fish processors and vendors, millions of men and women who so often must struggle to subsist but whose work is so important for mankind.

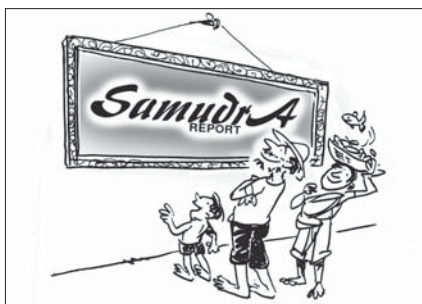
We are not a mega-size conglomerate; we are simply a network of supporters—presently located in 18 countries.

You will find that this first edition of

SAMUDRA Report in English has a strong bias towards India—where, on Kerala's sun-drenched beaches, our organization was born. But rest assured that in our next edition, the focus will be on Africa and in the issue after that, on Latin America...

So to all our friends, near and far, I send you greetings and our best wishes for a good catch!

—Pierre Gillet, 15, March 1988



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## INFOLOG: NEW RESOURCES AT ICSF

ICSF's Documentation Centre (dc.icsf.net) has a range of information resources that are regularly updated. A selection:

### Videos/CDs

#### Heading Troubled Waters

Directed and filmed by Himanshu Malhotra. Produced by the Gulf of Mannar Biosphere Reserve (GOMBR) Trust and UNDP-GEF

This film highlights the importance of the project on "Conservation and Sustainable Use of the Gulf of Mannar Biosphere Reserve's Coastal Biodiversity" of the UNDP-GEF, of which the GOMBR Trust is the implementing agency. The film highlights the importance of the rich biodiversity of the region and the threats it faces due to certain fishing practices. It brings out the successful interventions of the project in relation to protection, research and livelihood options.

#### Bio-cultural Community Protocols

Produced by UNEP and Natural Justice

This documentary brings together materials relating to rights-based approaches to conservation, customary use of biological resources and well-being.

### Publications

*Putting into Practice an Ecosystem Approach to Managing Sea Cucumber Fisheries*. Rome, FAO. 2010. 81pp.

Artisanal and industrialized fishers from more than 40 countries harvest over 60 species of sea cucumbers. These low-food-chain resources play important roles in nutrient recycling and sediment health in marine habitats. Owing to ease of capture and vulnerable biological traits, sea cucumbers have been easily overexploited in most countries, sometimes to local extinction. This document summarizes general management principles and a general framework for developing and implementing a management plan.

#### *Fisheries in Sri Lanka: Anthropological and Biological Aspects.*

*Volume 1: Anthropology of Fishing in Sri Lanka* by K.

Sivasubramaniam. Kumaran Book House. Chennai. 2009.

This series deals with the arrival of immigrants into Sri Lanka, their settlements along the coastal belt and the interior of the island and their contribution to the formation of marine and freshwater fishing communities of the country. It discusses the origin and arrival routes of the immigrants and the identifiable locations of their landing and formation of coastal fishing communities. An attempt has been made to identify, as far as possible, the immigrants, their racial origin, ethnicity, religion and the castes and clans and the factors that contributed to their involvement in fishing activities and the creation of fishing communities in the coastal and inland areas of Sri Lanka. Successive waves of immigrants from coastal areas of India introduced distinctly different methods of fishing, contributing to district-wise differences in the development of fishing technologies.

## ANNOUNCEMENTS

### MEETINGS

**United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea - 12th meeting, New York**  
20 to 24 June 2011

The 12th meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea will be held at the UN headquarters in New York from 20 to 24 June 2011. Pursuant to paragraph 228 and 231 of General Assembly resolution

65/37 of 7 December 2010, in its deliberations on the report of the Secretary-General on oceans and the law of the sea, the Consultative Process at its 12th meeting will focus its discussions on "contributing to the assessment, in the context of the United Nations Conference on Sustainable Development, of progress to date and the remaining gaps in the implementation of the outcomes of the major summits on sustainable development and addressing new and emerging challenges".

**ASEAN-SEAFDEC Conference: "Fish for the People 2020: Adaptation to a Changing Environment", Bangkok, Thailand**  
13-17 June 2011

The conference aims to develop the "Decade Resolution and Plan of Action on Sustainable Fisheries for Food Security in the ASEAN Region (Towards 2020)" by addressing concerns on the fisheries situation and issues that may impede the sustainable development and contribution of fisheries to food security. [www.ffp2020.org](http://www.ffp2020.org)

### WEBSITE

**Women, Gender Equality and Climate Change**

[www.un.org/womenwatch/feature/climate\\_change](http://www.un.org/womenwatch/feature/climate_change)

Womenwatch is the central gateway to information and resources on the promotion of gender equality and the empowerment of women throughout the United Nations system, including the UN Entity for Gender Equality and the Empowerment of Women (UN Women), the UN Secretariat and regional commissions.