# Meeting the global demand for aquatic food

The fisheries and aquaculture sector is a major source of food and livelihoods in Asia. Not only does the region have the highest average food fish consumption rate—estimated at 29 kg per person per year-but it has the highest contribution to global aquaculture, over 80 per cent. In order to maintain at least the current level of consumption, and taking into consideration the growing world population, Asia will require an additional 20 mn tonnes of fish per year by 2030, which will have to

come from aquaculture. This is a major task for the region and there will be hurdles on the road to success.

The Asia Regional Ministerial Meeting on Aquaculture for Food Security, Nutrition and Economic Development was convened in Colombo on 28-29 July 2011. Organized jointly by the Food and Agriculture Organization of the United Nations (FAO) and the Network of Aquaculture Centres in Asia-Pacific (NACA) and hosted by the Government of Sri Lanka, the meeting discussed issues pertaining

to aquaculture and regional co-operation in improving the contribution of aquaculture to food security and economic development.

This important international and high-level ministerial event was attended by delegations from 17 countries in the region, namely, Bangladesh Cambodia, China, Fiji, India, Indonesia, DPR Korea, Lao PDR, Malaysia, Maldives, Myanmar, Nepal, Philippines, Sri Lanka, Thailand, Timor Leste and Vietnam.

The keynote address was delivered by His Excellency,

the Hon. Mahinda Rajapaksa, President of Sri Lanka. Opening remarks were delivered by Árni M. Mathiesen, Assistant Director-General of FAO; Sena De Silva, Director General of NACA; and Rajitha Senaratne, Hon. Minister of Fisheries and Aquatic Resources Development, Sri Lanka. The opening ceremony was followed by ministerial statements concerning aquaculture, food security, nutrition and economic development.

The two-day meeting concluded with the 'Colombo Declaration', a political commitment to regional co-operation in aquaculture development for food security, nutrition and economic development. The declaration provides a policy framework for Asian governments to collaborate in pursuing these common goals, to share experience and build on each other's strengths for the benefit of all.

FAO was proud to be a partner in the meeting and hopes it will facilitate the region to reinforce its role and meet the global demand for aquatic food in the coming years.

http://www.fao.org/ fishery/nems/39992/ens

The Colombo Declaration can be downloaded from ftp://ftp.fao.org/FI/ DOCUMENT/aquaculture/ asian\_ministerial\_2011/colombo\_ declaration\_2011.pdf

## ORGANIZATIONAL PROFILE

# Global Alliance Against Industrial Aquaculture

 ${f E}$ stablished in 2010, the Global Alliance Against Industrial Aquaculture (GAAIA) is an international network dedicated to advancing environmentally and socially responsible aquaculture. GAAIA recognizes that salmon, shrimp, tuna and farming of genetically modified (GM) or genetically engineered (GE) fish ('Frankenfish') jeopardizes sustainable and safe seafood production.

By highlighting worst aquaculture practices, GAAIA will lead the fight against phoney schemes for standardssetting and certification for farmed salmon and shrimp farming, in particular. GAAIA will resist moves towards tuna farming, offshore fish farming and GE fish.

GAAIA has commenced a global campaign against 'Big Aquaculture', warning consumers about the dangers of salmon farming. Later this year, the alliance will issue a new report on salmon called Smoke on the Water, Cancer on the Coast and later, others on shrimp, tuna and GE fish.

GAAIA's 'Salmon Farming Kills' campaign uses similar graphic imagery to the 'Smoking Kills' campaigns

employed against Big Tobacco. "Salmon farming kills around the world and should carry a global health warning," said Don Staniford, global coordinator for GAAIA in British Columbia (BC). "As responsible global citizens, we need to expose the fact that salmon farming seriously damages human health, the health of our global oceans and the health of wild fish."



"By draining our Southeast Pacific oceans of wild fish for feed, Norwegian-owned salmon farmers are robbing Pedro to pay John and stealing fish out of the mouths of Latin Americans," said Juan Carlos Cardenas, a veterinary doctor and Director of Ecoceanos in Chile. "This lethal industry has been responsible for the deaths of divers and 64 workers as well as hundreds of sea lions and other marine birds and mammals. The bad practices of Norwegian companies operating in Chile provoked the most important sanitary, environmental and social crisis in the south Chilean

coastal regions, where 20,000 jobs have been destroyed during the last three years. The industry has blood on their hands and ought to hang their heads in shame."

GAAIA is now fighting a defamation lawsuit brought by the Norwegian-owned company Cermaq (whose largest shareholders are the Norwegian government's Ministry of Trade and

Industry). A 20-day trial is scheduled to start in January in the BC Supreme Court.

In July, GAAIA scored a hit in The New York Times in an article "Norwegians Concede a Role in Chilean Salmon Virus". A followup editorial—"About that salmon"—published in August stated: "Salmon farming is a problem everywhere, but as it exists now in Chile—the second-largest producer, after Norway-it is simply unsustainable".

GAAIA is also leading the fight against the development of the Aquaculture Stewardship Council and the Global Aquaculture Alliance.

For more information visit: http://www.wildsalmonfirst. org/restaurants

# VERBATIM

The shore at low tide was the place where man first learned to look for food, raiding the haunts of the shellfish, the stones covered with molluscs, and for a different purpose, the vast beds of seaweed...

FROM THE PROCEEDINGS OF THE UN SCIENTIFIC CONFERENCE ON THE CONSERVATION AND LITILIZATION OF RESOURCES, LAKE SUCCESS, 1949

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# Fisheries of the Pacific Islands

Excerpted from Gillett, R. (2011). "Fisheries of the Pacific Islands: Regional and National Information". FAO Regional Office for Asia and the Pacific, Bangkok, Thailand. RAP Publication 2011/03, 279 pages.

FISHERIES STATISTICS

The Pacific Islands region consists of 14 independent countries and eight territories located in the western and central Pacific Ocean. There is also a substantial amount of international waters (high seas) in the area. The Pacific Islands region contains about 200 high islands and some 2,500 low islands and atolls. Apart from the Pitcairn group and the southern part of French Polynesia in the east of the area, all the islands of the area lie in the tropical zone.

#### Offshore fishery statistics

The offshore statistical systems are in relatively good condition, both at a national and regional level. As a component to the fisheries services to the region of the Secretariat of the Pacific Community (SPC), the Oceanic Fisheries Programme (OFP) has a Statistics and Monitoring Section. The activities of that section currently include the compilation of estimates of annual catches of target tuna and billfish species, the

estimation of annual catches of non-target species, the compilation of operational (logsheet) catch and effort data, data processing on behalf of member countries and territories, the provision of technical support for port sampling programmes and observer programmes in member countries and territories, training in fisheries statistics and database management, the development of data collection forms, the publication of the Tuna Bulletin and the Tuna Fishery Yearbook, statistical analyses, and the provision of statistical support to other regional and international organizations involved in the fisheries of the region.

#### Coastal fishery statistics

The situation of coastal fisheries statistics is considerably different. For coastal fisheries, the quality of fisheries statistics furnished to FAO by national governments is generally not very good. In fact, the estimation of the production from coastal fisheries by government fishery officers in about half of the Pacific Island countries is largely guesswork. Typically, government fisheries agencies give low priority to estimating

the amount of coastal catches. In general, the smaller the scale of the fishing, the less is known about the production levels, with quantitative information being especially scarce for the subsistence fisheries in most countries.

Short-term support to enhance fisheries statistical systems has been provided by FAO, SPC, and several bilateral agencies. Typically, once external support is withdrawn, the statistics systems usually degenerate and eventually become dysfunctional. Despite the importance of data on coastal fisheries, the reality is that in the prioritization of scarce government funding, the ongoing routine collection of fisheries data has not received much priority. Although most of the countries in the region attach great important to their subsistence and small-scale commercial fisheries, it is these fisheries that present the greatest difficulties for the collection of production information. Also to be considered is that many fisheries specialists have questioned the costeffectiveness and practicalities of regular data collection from small-scale fisheries in the Pacific Island countries. Attention is now being focused on the collection of fisheries production information using surveys outside the fisheries sector.

# Important types of coastal fishing

The table gives estimates of fisheries production for each Pacific Island country for 2007.

The figures show that in most countries of the region, the volume of production from coastal subsistence fisheries is many times greater than that of coastal commercial fishing, with Tonga and Samoa being notable exceptions.

## Subsistence fishing

As can be seen in the table, about 70 per cent of the overall fisheries production from coastal areas of the Pacific Islands is produced by subsistence fishing. In several countries, over 80 per cent of the coastal catch is from the subsistence sector: Tuvalu, Solomon Islands, Vanuatu, PNG and Niue. In a recent review of benefits from Pacific Island fisheries, ADB estimated that the contribution of subsistence fishing to the gross domestic product (GDP) was actually quite large in a number of Pacific Island countries. Overall, about 30 per cent of the GDP contribution from the fishing sector in the region comes from subsistence fishing.

Subsistence fisheries generally involve a large variety of species, including fish, molluscs, crustaceans, algae and other groups.

Subsistence fishing tends to be most important in rural areas, but as rural economies become increasingly monetized, the amount of fish being traded for cash grows and there is a gradual move away from fishing for home consumption or to meet social obligations, and towards fishing as a means of generating cash income

Much of the subsistence fishing in the region either does not involve a vessel (that is, gleaning from shore, or swimming) or uses a non-powered canoe.

# Marine Fishery Production in 2007 in Pacific Island Countries (metric tonnes)

	Costal commercial	Coastal subsistence	Offshore locally-based	Offshore foreign-based	Total
PNG	5,700	30,000	256,397	327,471	619,568
Kiribati	7,000	13,700	0	163,215	183,915
FSM	2,800	9,800	16,222	143,315	172,137
Solomon Islands	3,250	15,000	23,619	98,023	139,892
Marshall Islands	950	2,800	63,569	12,727	80,046
Nauru	200	450	0	69,236	69,886
Fiji	9,500	17,400	13,744	492	41,136
Tuvalu	226	989	0	35,541	36,756
Vanuatu	538	2,830	0	12,858	16,226
Samoa	4,129	4,495	3,755	25	12,404
Tonga	3,700	2,800	1,119	0	7,619
Palau	865	1,250	3,030	1,464	6,609
Cook Islands	133	267	3,939	0	4,339
Niue	10	140	640	0	790

Source: ADR (2009)

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# Roundup news, events, briefings and more...

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Typical characteristics of subsistence fisheries in the Pacific Island are: specialized knowledge often passed down through generations; labour-intensive operations, sometimes involving the entire community; sharing of the catch; social restrictions/prohibitions; and specialization of activity by gender.

# INFOLOG: NEW RESOURCES AT ICSF

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

#### Publications

Poverty Mosaics: Realities and Prospects in Small-Scale Fisheries Svein Jentoft and Arne Eide (Eds.) 1st Ed. New York: Springer, 2011. Hardcover. ISBN 978-94-007-1581-3

Small-scale fisheries are a major source of food and employment around the world. Yet, many small-scale fishers work in conditions that are neither safe nor secure. Millions of them are poor, and often socially and politically marginalized. This book provides a global perspective, situating small-scale fisheries within the broad academic discourse on poverty, fisheries management and development. Indepth case studies from 15 countries in Latin America, Europe, South and Southeast Asia and sub-Saharan Africa, demonstrate the enormously complex ecological, economic, social, cultural and political contexts of this sector. Conclusions for policymaking, formulated as a joint statement by the authors, argue that fisheries development, poverty alleviation, and resource management must be integrated within a comprehensive governance approach that also looks beyond fisheries.

Fisheries Management in Japan: Its Institutional Features and Case Studies

Mitsutaku Makino. 1st Ed. Fish & Fisheries Series, Vol. 34. 2011

Japan is one of the world's largest fish-eating countries, with a long history, and has developed its own customs and values in terms of managing fisheries resources. The first half of this book introduces the history and institutional features of capture-fisheries management in Japan, with nine case studies from sub-Arctic to tropical ecosystems, from sedentary to migratory species, and from small-scale coastal to offshore industrial fisheries. The second half of this book considers the advantages and limitations of the Japanese fisheries management regime, and discusses the necessary environmental policy measures to bridge the gaps between fisheries management and ecosystem-based management. In closing, the Grand Plan of Japanese fisheries policy for the next 20 years, and three future scenarios are presented.

## Videos/CDs

Murky Waters: The Devastating Truth Behind Shrimp Farming http://www.youtube.com/watch?v=hPJpPEH3170

In this film and subsequent report, the Swedish Society for Nature Conservation (SSNC) reveals the extent of the destruction caused by the shrimp farming industry. When more and more people choose tropical prawns in their diets, it increases the environmental degradation and human suffering in producer countries, like Bangladesh, argues this video.

## FLASHBACK

# Small scale, large agenda

The 25th Session of the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO) was held from 24 to 28 February 2003 at Rome. Notably, one of the agenda items was on 'Strategies for Increasing the Sustainable Contribution of Small-scale Fisheries to Food Security and Poverty Alleviation'. The last time small-scale

fisheries was on the agenda of COFI was 20 years ago, in 1983, in the lead-up to the FAO World Conference on Fisheries Management and Development in 1984.



The inclusion of this agenda item was particularly appropriate, given the recently organized World Food Summit and the World Summit on Sustainable Development, both of which focused on the importance of eradicating hunger and poverty. It was also appropriate in view of the process being initiated by the FAO to develop "voluntary guidelines to achieve the progressive realization of the right to adequate food", as a follow-up to the World Food Summit.

The inclusion of this agenda item once again reaffirmed the important role small-scale fisheries plays, especially in the developing world, in providing income, employment and in contributing to food security. What was needed, however, was a much stronger endorsement that the small-scale model of fisheries development is inherently more suitable, even on grounds of environmental sustainability, a key issue of concern today. In this context, it is worth recalling the observation made in the report of a joint study by the World Bank, the United Nations Development Programme, the Commission of the European Communities and FAO in 1992, titled A Study of International Fisheries Research: "...in many situations, the comparative advantages may lie with the small-scale sector. It is labour-intensive, consumes less fuel, generally uses more selective gear, and is less dependent on imported equipment and materials. The small-scale sector's capital is owned locally, often by the fishers themselves. And because the small-scale fishers depend on resources adjacent to their communities, they have a greater self-interest than large-scale fishers in management of their fisheries."

—from comment in SAMUDRA Report No.34, March 2003

# **ANNOUNCEMENTS**

### MEETINGS

Sub-Regional Workshop for South, East, and South-East Asia on Capacity-building for Implementation of the CBD Programme of Work on Protected Areas

6 - 10 December 2011 Dehradun, India

The objective of the workshop is to build capacity to (i) create a national action plan for implementation of the POWPA, (ii) access funding based on these action plans, and (iii) strengthen implementation of the POWPA on the themes of governance, climate change, sustainable financing, and valuation of the costs and benefits of protected areas.

#### COFI Sub-Committee on Fish Trade—13th Session

20 - 24 February 2012 Hyderabad, India http://www.fao.org/fishery/ nems/39823/en

### WEBSITES

Voluntary Guidelines on Securing Sustainable Small-scale Fisheries [VG-SSF]

# www.fao.org/fishery/ssf/guidelines/en

The 29th Session of the FAO Committee on Fisheries (COFI), held in February 2011, recommended that an international instrument on small-scale fisheries be developed.

The Guidelines are to be developed through a consultative process involving governments, regional organizations, civil society organizations, and small-scale fishers, fishworkers and their communities.

This website provides information on the process, and the tentative road map.

The website provides the Discussion Document that has been prepared as an input into the consultations and the development of the Guidelines.