THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



## **Mackerel Wars**

**Genetically Engineered Salmon** 

Indo-Sri Lanka Fishermen's Agreement

**Chile's Lobster Fishery** 

**Convention on Biological Diversity Meet** 

The Tárcoles Civil Society Workshop



ICSF is an international NGO working on issues that concern fishworkers the world over. It is in status with the Economic and Social Council of the UN and is on ILO's Special List of Non-governmental International Organizations. It also has Liaison Status with FAO.

As a global network of community organizers, teachers, technicians, researchers and scientists, ICSF's activities encompass monitoring and research, exchange and training, campaigns

and action, as well as communications. *SAMUDRA Report* invites contributions and responses. Correspondence should be addressed to Chennai, India.

The opinions and positions expressed in the articles are those of the authors concerned and do not necessarily represent the official views of ICSF.

All issues of SAMUDRA Report can be accessed at www.icsf.net



HE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS

NO.57 | NOVEMBER 2010



### **FRONT COVER**



"Salmon for our people is wealth, economy and nature Children's art contest prize-winning entry from Palana village, Kamchatka, Russia

### PUBLISHED BY

Chandrika Sharma for International Collective in Support of Fishworkers 27 College Road Chennai 600 006, India PHONE: (91) 44-2827 5303 FAX: (91) 44-2825 4457 EMAIL: icsf@icsf.net

ICSF BELGIUM OFFICE Sentier des Rossignols 2 1330 Rixensart, Belgium PHONE: (32) 2-652 5201 FAX: (32) 2-654 0407 Email: briano@scarlet.be

**EDITED BY** 

KG Kumar

DESIGNED BY P Sivasakthivel

PRINTED AT

Nagaraj and Company Pvt. Ltd., Chennai

ILLUSTRATIONS BY

Sandesh (sandeshcartoonist@

FOR LIMITED CIRCULATION ONLY

#### **SAMUDRA News Alerts**

SAMLIDRA News Alerts is a free service designed to deliver news reports and analysis on fisheries, aquaculture and related issues, on a daily or weekly digest basis, in plain text or HTML format.

The service often features exclusive, original stories on small-scale and artisanal fisheries, particularly in the regions of the South, as well as issues that deal with women in fisheries and safety at sea. Apart from news and stories on fisheries, the service also focuses on environmental and oceans issues. Please visit http://www.icsf.net to subscribe to SAMUDRA News Alerts.

### **BACK COVER**



A stilt fisherman from Ahangama, Galle Sri Lanka Photo: A.V. Hemajith Tharinda

F	П	R	O	Р	F	Δ	N	U	N	1 (	۱ (
_	U	١,	$\circ$		_	$\overline{}$	1 4	U	1.4		<i>_</i> '

### Mackerel mayhem ..... 4 On the ongoing dispute in northern

Europe over the boom in mackerel stocks

### DOCUMENT

### **Small and mighty......11**

The Banjul civil society declaration on sustainable livelihoods in African fisheries

## Building partnerships...... 14

The case of Red Sea fisheries management shows how fishers' rights can be strengthened

### MEDIA

### The write stuff ...... 18

The website of Comité Local des Pêches Le Guilvinec celebrates its second anniversary

### UNITED STATES

### Frankenfish salmon ...... 21

The United States is close to approving genetically engineered salmon

### INDIA-SRI LANKA

## Trawl brawl ..... 24

Indian and Sri Lankan fishermen have worked to co-exist in the Palk Bay

### CHILE

## Tsunami recovery ...... 28

On the traditional tenure system of the fishing community of Juan Fernández

### REPORT

### New goals from Nagoya ...... 33 The Nagoya meeting of the Convention on

Biological Diversity made some progress

### Beyond Bangkok ...... 41

The civil society workshop in Costa Rica focused on small-scale fishers in Latin America

### DOCUMENT

### Securing small-scale fisheries ...... 46

Recommendations adopted at the San José FAO workshop dealt with small-scale fisheries

COMMENT	. 3
ROUNDUP	50



## Cracking the Code for Small-scale Fisheries

There is need for both an international instrument and a global programme to address the specific needs of the world's small-scale and artisanal fisheries

hould the Code of Conduct for Responsible Fisheries (CCRF) of the Food and Agriculture Organization of the United Nations (FAO) be "opened up" to include a special Chapter on small-scale artisanal fisheries? This was called for by the civil society organizations at the FAO's Global Conference on Small-scale Fisheries (4SSF) in October 2008. The call was reiterated by civil society at the 28th Session of the FAO Committee on Fisheries

The CCRF, while making several references to small-scale fisheries and fishworkers, does not provide specific guidance on how the small-scale artisanal subsector, which employs about 90 per cent of those engaged in fishing and fisheries-related activities, should be supported and promoted. The

CCRF also lacks a gender perspective—especially to address the specific forms of discrimination faced by millions of women who are part of the fisheries worldwide, or to acknowledge the vital role they play at all levels. For civil society, these are areas that need urgent attention.

However, several delegations to COFI 28 opposed opening up

the CCRF, which, it was argued, could prove to be a "Pandora's Box". If opened up for small-scale artisanal fisheries, then why not for other interests? While there was consensus on the need to support small-scale artisanal fisheries, there was no consensus on the best way to do so. Many Members expressed the need for an international instrument on small-scale fisheries, which could comprise a new article in the Code, an international plan of action (IPOA) and/or the development of guidelines that would guide national and international efforts to secure sustainable smallscale fisheries and create a framework for monitoring and reporting. In addition, many Members called for the establishment of a new COFI Sub-Committee on small-scale fisheries. In the end, COFI 28 directed the FAO Secretariat to examine various options to carry these suggestions forward.

To follow up on the mandate given by COFI, the FAO organized three regional workshops in Asia, Africa and Latin America, in October 2010. This enabled a large number of both governmental and civil society participants to provide their views

on how small-scale artisanal fisheries can be best supported and enabled to fulfil their potential. All the three workshops recommended developing a new instrument, complementing the CCRF, to address small-scale and artisanal fisheries issues.

ICSF feels that there is a need for both an international instrument and a global programme. With the world gripped by concerns about overfishing, excess capacity, declining biodiversity and climate change, as well as the challenges of food insecurity and poverty, it is increasingly evident that sustainable small-scale artisanal fisheries within a human-rights framework offers the most viable solution. There is recognition today that the small-scale artisanal fisheries subsector is relatively more sustainable, energy-efficient and less destructive, even as it

> supports millions of livelihoods across the world, and supplies diverse populations, and particularly rural and remote populations in food-insecure regions, with a rich source of nutrition.

It is also recognized fishing communities in many regions live and work under extremely precarious and

that small-scale artisanal

vulnerable conditions, due to a range of factors that include insecure rights to land and fishery resources; indebtedness; unfair and unsafe working conditions; inadequate health and educational services and socialsafety nets; natural disasters and climate change; and exclusion from decision-making processes. Women fishworkers experience particular discrimination.

The potential of a new instrument to strengthen the social pillar of sustainable development and to effectively complement the CCRF within the framework of a human-rights approach was well recognized by the regional workshops. The onus is now on the 29th Session of COFI, to be held from 31 January to 4 February 2011, to respond in a manner in keeping with these recommendations. If it is not possible to open up the Code, COFI should agree to develop an instrument, along the lines of FAO's Right to Food Guidelines. This would go a long way in meeting the aspirations expressed in the 2008 civil society Bangkok Statement. We hope that COFI obliges and decides upon the most appropriate instrument for further recognizing small-scale artisanal fisheries.



## **Mackerel Mayhem**

The ongoing dispute in northern Europe over the boom in mackerel stocks and their transboundary migration has implications for the future of the fishery

ow should fisheries management respond when stocks fluctuate unexpectedly upwards and fish migrate across boundaries? What are the rights of coastal States when they receive such an unexpected bonanza? What steps must be taken to ensure that the rights of existing operators are respected, that there is a fair allocation of access to fisheries resources, and that responsible fishing prevails?

These bothersome questions comprise the conundrum currently facing scientists, fishery managers and politicians in northern Europe over mackerel stocks that recently boomed and migrated into Icelandic waters and other areas in vast numbers.

In August this year, newspaper headlines proclaimed a fish war over

... there are correlations between the different species as they tend to compete for some of their feed sources.

mackerel in northern Europe. This followed Iceland's gatecrashing entry into the mackerel fishery and the angry response it provoked amongst European Union (EU) and Norwegian operators and politicians.

A meeting held in London at the end of October this year sought to swing the spotlight on mackerel as the coastal States with interests in catching this fast-swimming, high-value species gathered in an attempt to reconcile their practically irreconcilable differences. Yet, despite eerily familiar utterances,

the meeting came to a close with no agreement reached.

For many years, the mackerel fishery in the northern part of the North Atlantic has been divided between the Faroe Islands and Norway, with Ireland, the United Kingdom (UK), Denmark and The Netherlands being the main mackerel-catching nations within the EU.

Things had been uneasily stable for a long time, at least as far as mackerel stocks were concerned, reaching international although agreements on species that migrate across arbitrary borders that humans draw on maps has never been easy. When Atlanto-Scandian herring re-appeared in catchable volumes in the 1990s, for instance, it took several years before an uneasy truce could reached—which subsequently lapsed before the rift could be shored up again—while management of blue whiting took decades of meetings to fructify.

In addition, consider also the horse mackerel fishery that Norway shares with the EU, and the capelin that migrates around Iceland, which Norway, Greenland and the Faroe Islands have interests in too. The pelagic complex of fisheries as a whole is far from simple, particularly as it becomes increasingly clear that there are correlations between the different species as they tend to compete for some of their feed sources.

### Reduced fishery

Right now, mackerel is at its peak in terms of stocks, while blue whiting is at a low point, with the fishery for 2011 reduced by more than 90 per cent, and

This article is by **Quentin Bates** (fnifeatures@ukonline.co.uk), Technical Editor at Fishing News International, published by IntraFish Media there are signs that Atlanto-Scandian herring stocks may be declining too.

It has been a few years since mackerel showed up around Iceland in enough numbers to start appearing on barbecues. It has been only a very few years since there was enough to see a sizeable commercial fishery develop with startling rapidity, but that is what has happened—and an unholy row with Iceland's neighbours has been brewing since the first big catches were landed by the Icelandic fleet.

For several years, there have been very heavy concentrations of mackerel in Icelandic and Faroese waters as this migratory species has expanded north and west beyond the edges of its usual migration patterns. Fishermen report that mackerel stocks in Icelandic waters are virtually impossible to avoid, even when fishing with bottom trawls that otherwise rarely take more than a handful of pelagic fish.

To begin with, the high volumes of mackerel taken as a by-catch with the usual summer fishery on Atlanto-Scandian herring were a nuisance. As a new species for Iceland, there was no framework for handling it, and so mackerel went mostly for fishmeal. Some smaller operators were quick off the mark to catch mackerel with handlines and did well on this new fishery, while the main part of the pelagic industry struggled to adapt—but did so rapidly.

The values also became apparent quickly. While landings initially went for fishmeal production, it did not take long for the big players of Iceland's highly vertically integrated fishing industry to find techniques for producing mackerel for human consumption.

Iceland set itself a 130,000 tonne quota for 2010 (as it had in 2009)—to the abject fury of the Norwegian and EU mackerel fishermen. The quota announcement was made ahead of the meeting in late 2009, at which the established mackerel-fishing nations would set their annual allocations—ostensibly so that they could take Iceland's fishery into account.



A Norwegian purse seiner, part of the fleet run by independent operators, often on a family basis with crew drawn from the local community

In the event, the mackerel nations set something close to their usual quotas for the year—alongside a virtually unrestricted fishery taking place next door. The Faroese fisheries minister, Jacob Vestergaard, came under increasing pressure to follow Iceland's lead by setting an autonomous Faroese quota, and jeopardizing existing agreements between the Faroe Islands, Norway and the EU.

Vestergaard has been under pressure from both directions—firstly, from operators without mackerel quotas who saw an abundant and untapped resource as well as an influx of a hungry predatory species that could prey on the juveniles of their normal demersal target species of cod, haddock and saithe; and, secondly, from the established Faroese operators who held mackerel quotas and who were opposed to leaving the agreement.

### Fishery quotas

The Faroese government followed Iceland's 130,000-tonne lead by announcing its own 85,000-tonne fishery in Faroese waters. The fish were easy enough to catch, and the quota was finished by autumn over a summer that bristled with difficulties. One Faroese pelagic vessel was forcibly prevented from landing its catch in Peterhead by furious Scottish fishermen.

Mackerel are a very valuable species, particularly on the highly demanding Japanese market, but their value is also strictly linked to the optimum fat content and condition, which are formed during the winter months—when the fish have migrated firmly into EU and, mainly, Norwegian waters. The established Norwegian, Faroese and EU mackerel fishing operators have reciprocal rights that allow them access to

What had once been a fairly lawless fishery has been rigorously brought under control over the last 15 years.

mackerel in Norwegian waters at the time of the year when they are at their most valuable, as well as access to mainly Norwegian processors who bid fiercely for the highest-quality catches destined for Japan.

Crucially, Iceland has no access to winter mackerel in Norwegian waters; so the large amounts of mackerel frozen this summer for human consumption in Iceland are for the relatively low-cost eastern European markets, and thus the established Faroese operators could see themselves losing access to the fishery that is the mainstay of their operations.

For 2010, the International Council for the Exploration of the Sea (ICES) recommended a 572,000-tonne total allowable catch (TAC), which, it is now clear, has been significantly exceeded. Landings by the coastal States of Norway, the Faroe Islands and the EU came to 800,000 tonnes, to which can be added the 130,000 tonnes caught by Iceland.

For next year, ICES has recommended a 672,000-tonne TAC, and it seems a foregone conclusion that this will be exceeded in much the same way, if no agreement is reached.

The recriminations arising from the mackerel war have been deafening. Politicians on all sides have protested volubly about the situation. Iceland has been vilified, and the Faroe Islands condemned for their actions this year. In particular, Iceland, which is still in the throes of a drawn-out economic crisis, has protested that it has a right to catch its own fish in its own waters.

The Icelandic fisheries minister, Jón Bjarnason, has more than a few times reiterated his government's position that Iceland can justify its mackerel fishing, and that this will continue, as have other government and industry figures in Iceland. The EU Fisheries Commissioner, Maria Damanaki, has taken a bullish stance, while various political figures in Norway, Scotland and elsewhere have not been shy to condemn the position taken by Iceland and the Faroe Islands. The media have not been far behind either, lapping up calls by Scottish Members of Parliament (MPs) and Members of the European Parliament (MEPs) for Icelandic and Faroese exports to be boycotted.

The amounts of money involved are not small. The annual mackerel fishery is worth an estimated Euro 600 mn; so the heat of the debate is understandable. The anger is equally easy to fathom. What had once been a fairly lawless fishery has been rigorously brought under control over the last 15 years, largely at the instigation of Norwegian operators who saw their markets under threat. While there are undoubtedly a few tonnes of black-market mackerel landed here and there-and some UK operators are currently being investigated—the majority of the industry in Norway, the Faroe Islands and the EU has already been through the painful process of seeing its mackerel fishery severely curtailed and restricted. It thus appears understandable that the sight of what is practically a restriction-free fishery taking place next door-but-one cannot be anything but galling.

### **Deep suspicions**

There is, particularly in Norway, a deep suspicion of Iceland's motives in allowing a mackerel fishery to take place on such a scale. The Norwegian fishing industry feels that it has already had its fingers burned in past dealings with Iceland, such as when

Icelandic trawlers began fishing in the Barents Sea Loophole and came away with a groundfish quota on Norway's doorstep. The race for blue whiting saw the Icelandic pelagic fleet concentrate on this fishery to build up a strong track record in a few short years of fishing, and the Norwegian view is that Iceland's tactics also secured it an unjustifiably large share of the TAC.

For the Norwegian pelagic business, the mathematics are simple enough. A two per cent share of the mackerel TAC given to a newcomer like Iceland means that the equivalent of two Norwegian pursers lose their income.

The fact of the case is that Iceland had knocked repeatedly at the door of the coastal States to ask for a mackerel quota in the past, but had found itself repeatedly rebuffed on the grounds that with no mackerel in its waters, it could stay outside the club. Iceland claims to have been excluded illegally from the mackerel club. Norway points to its own long track record of fishing mackerel, which was a marginal species in the 1970s.

There are justifiable and understandable standpoints on all sides and it should not be imagined that all is peace and harmony inside the mackerel club. A squabble between the EU and Norway last year was resolved after several months, much to Norway's advantage, EU fishermen would claim.

Negotiations are certainly not an easy process. Reaching agreements between nations on other stocks have been long drawn-out affairs fraught with difficulty, and they have never been reached easily. In the case of blue whiting, for instance, talks had been going on for close to 20 years and no real urgency was seen until alarm bells began to ring on the state of the stock, and the industry itself began to discreetly push for movement.

It is worth asking what would happen if Iceland's valuable capelin fishery were to shift its migration into a new pattern that allowed Norwegian and EU vessels to take part in a quota-free bonanza. Would the EU

and Norwegian governments take immediate steps to curtail the activities of their fleets once Iceland began to complain? does That not seem likely. Would Icelandic government and industry accept the situation with a resigned shrug of the shoulders, and reduce its quotas to accommodate the newcomers? That seems an even more farfetched idea.

There are some who will admit privately that Iceland should have been allowed into the coastal States' mackerel club years ago, with a small quota, in which case



Fresh-caught mackerels. An unholy row over mackerel stocks has developed in North Atlantic waters

there would have been a structure within which to address the recent huge increase in mackerel in Icelandic waters. There are also reports that Iceland could have had a share of the mackerel TAC

There are justifiable and understandable standpoints on all sides and it should not be imagined that all is peace and harmony inside the mackerel club.

as long ago as 2009, but for the flat refusal of its negotiators to settle for anything less than a fifth of the fishery it had only just embarked on.

### Large operators

However, the spectacle of Icelandic operators shovelling up generous volumes of a shared stock on their own terms in a fishery dominated by a small group of large operators does

## **Might Is Not An Access Right**

The EU-lceland spat over mackerel highlights the flaws of basing access on historic catches, especially for migratory stocks

The last time there was a disagreement with Iceland over rights to resources in Icelandic waters, the British government sent in naval gunboats in what became known as the 'cod wars'. The current war of words over mackerel raises similar issues about who should have priority access to fish stocks: coastal States and their communities or those with historic catch records?

Does the recent migration of mackerel stocks into its waters give Iceland a legitimate right to catch them and set their own quota? The Federation of Icelandic Fishing Vessel owners say it does. According to them: "The mackerel are in Icelandic waters and belong to us". In response, Scottish pelagic fishing interests demanded a European Union (EU) blockade of Icelandic and Faroese ships and goods, accusing Iceland and Faroe Islands of plundering mackerel stocks.

But this is certainly not a David-and-Goliath combat. It is all about powerful industrial fishing operations battling it out to get as much access as they can to highly valuable fish stocks. It may be that large pelagic trawlers and purse seiners are a most effective way to tap into these booming mackerel stocks and transform them into wealth through fishmeal or high value export markets. But hardly equitable, and potentially hugely unsustainable given their voracious appetites; access to resources should first and foremost be determined by the capacity of fleets to deliver environmentally, socially and economically sustainable fishing. Smaller-scale fishing and ancillary shore based

nothing for Iceland's cherished image as a responsible fishing nation. At the beginning of this year, the organization that represents the interests of these vessel operators busily pilloried the minister for his decision to allow an additional quota of monkfish to mainly the smaller end of the fleet, and the opening of a summer coastal fishery outside the established quota system. However, it apparently saw nothing unsustainable about contributing to taking more than 100,000 tonnes of mackerel against scientific advice.

Pelagic stocks across the North Atlantic are part of a complex that is not fully understood. It seems, however, that there is a delicate interplay between the cyclical rise of one species as another declines in strength, and the effects of even small changes in sea temperatures and access to feed.

But taking into account the experience of the fickleness of these stocks, it seems remarkable, with hindsight, that the possibility does not appear to have been entertained that mackerel could shift their migration patterns that far west.

It has happened before, although not in living memory. There are records

that indicate the presence of boiling shoals of mackerel in remote Icelandic fjords a century ago, which echo today's reports of abundant mackerel in Iceland and the Faroe Islands, as there are further reports of starving seabird populations brought on by the lack of sand eels. The possibility is too strong to be overlooked that the sheer bulk of migrating mackerel has displaced the vulnerable sand eel.

That appears to be the way nature works. Marine species never exist in a state of stability—making a mockery of the whole idea of maximum sustainable yield (MSY) across all stocks, an idea so beloved of office-based bureaucrats. One stock gains strength at the expense of another in what can be seen, with hindsight, as predictable regularity, in the case of some stocks.

### **Trawl sampling**

Research carried out this summer in a combined effort by Norwegian, Faroese and Icelandic research bodies concluded that there is mackerel everywhere across the North Atlantic. The results of trawl sampling indicated a 4.5-mn tonne mackerel stock, while acoustic surveying hints at a stock in

operations are much more effective in generating local employment, supplying local markets, and generally spreading the benefits in a more equitable way.

Such operations are also far more flexible in switching between stocks, and have a lower environmental footprint. Ensuring sufficient access to migratory and other stocks should be the priority, be they in EU waters or elsewhere. This principle is equally applicable to stocks of tuna (tropical and temperate), horse mackerel in the South Pacific or mackerel in the North Atlantic.

Valuable fish stocks often do not respect national boundaries, and, given the increasingly unpredictable trends of climate and temperature, the seasonal migration patterns of fish are proving equally fickle to predict. Under such circumstances, unless space is created for agreement on how access to valuable fish stocks can be shared, accommodating the interests of all different fleets and countries, including newcomers (such as Iceland, in this case), there can be no certain future.

New and just ways must be found for allocating fishery access to shared fish stocks that ensure long-term sustainability and that safeguard the rights of fish-dependent coastal communities. 'Might is right', and 'first come, first served' are not good principles on which to base such access, as is currently the case with using historic catches or 'track records'.

The approach advocated by the Green Group in the European Parliament deserves serious consideration. Their contention is that priority access should not be given to those who fish the most, but rather to fishing operations that contribute most to the local economy, do least damage to the marine environment, and that distribute the benefits from wild fish resources most equitably.

—by Brian O'Riordan ICSF

excess of 12 mn tonnes. The true figure is undoubtedly somewhere between the two, as neither one nor the other of these methods is likely to give a precise answer. The survey also showed that mackerel have spread far to the west of the Icelandic exclusive economic zone (EEZ) in substantial concentrations, which further begs the question of how far mackerel have spread into the Greenlandic EEZ and what implications this could have.

The research report underscores what fishermen have been saying for some years: that mackerel stocks have been gaining strength and that quotas fail to reflect this fact, while scientific advice has verged on the ultracautious.

Iceland is demanding a 20 per cent share of the mackerel fishery, a largely unrealistic demand, considering its short history of mackerel landings. But each year that goes by without an agreement means that the track record in the fishery grows in strength and Iceland gains a little more leverage to bargain with.

For the coastal States, it is politically impossible for Iceland to have a larger quota than the five per cent of the

TAC that the Faroe Islands had—at least until this year when the Faroese government bumped its fishery up to 85,000 tonnes.

At the latest meeting in London, a three per cent figure was on the table for Iceland, which was, unsurprisingly, rejected. There is a huge chasm between three per cent and 20 per cent. It remains to be seen how long it will take to reach a consensus of some kind and just how much real will there is for this to happen. Iceland is under no real pressure to sign anything yet. The mackerel issue does have a bearing on the country's application for EU membership—but is only one of a host of matters that need to be cleared up before Iceland may, or may not, decide to join Europe.

As things stand, the small group of fishing vessel owners who are applying as much pressure as they can on the government to push for a maximum mackerel quota also make up the influential lobby that is solidly against EU membership.

### **Dangerous gamble**

For Iceland, this brinkmanship may turn out to be a dangerous gamble. The

mackerel stocks have already migrated north and west—and could well migrate back. Some would say that this is a certainty and it is just a question of when it will happen.

There is also the possibility that, with continuing heavy fishing, the stocks could diminish and would no longer need to migrate as far west, leaving Iceland with no mackerel in its waters; and with no agreements and no access to it in other waters.

For the other parties in the mackerel war, there is a greater urgency. Much of the pelagic fishing carried out by Norwegian and EU vessels is certified by the Marine Stewardship Council (MSC), and the Faroese also embarked on obtaining MSC certification. The MSC has certainly taken notice of the fact that mackerel have been fished considerably in excess of the scientific recommendations, and has hinted at a withdrawal of certification if the fishery is not managed responsibly. That would be disastrous for any operator or processor trying to sell fish to a western European market where an ecolabel has become a necessity.

Undoubtedly, eventually there will be an agreement and some sort of armistice in the mackerel war. As past experiences of trying to engineer uneasy truces in disputes on herring and blue whiting have shown, the only certainty is that this time around, it will be an agreement that none of the parties will be satisfied with. Fishermen on all sides will feel that they have been let down by their governments, and both owners' and fishermen's organizations will continue to pressure their governments for a better deal.

All those involved in the mackerel war have interests at stake, and all the governments concerned are lobbied hard by their fishing sectors. Also at stake are issues of national interest and national pride—nobody is prepared to back down and then go home to explain why they came away with such a poor deal. Cue: stalemate.

If the many claims—all justifiable in one way or another—are added together, the total is somewhere close to 200 per cent of the mackerel fishery,

with nobody prepared to back down. There are no easy answers, and if, or when, an agreement is reached, the only certainty is that nobody will come away from the negotiating table with much to gloat about.

In the past, fisheries managers did not entertain the possibility of the mackerel shifting westwards. Unfortunately, existing mechanisms for managing highly migratory shared stocks appear to be woefully inadequate. The present system demonstrates just how futile it appears to be to try and manage, on the basis of national flags, stocks of fish that blithely ignore the borders set by humans, especially as each nation's industry understandably lobbies its representatives at the negotiating table into an inflexible position.

It is a tall order to hope for a quick and happy end to the mackerel war, but the experience of seeing just how long these agreements take to reach, and how shaky they are when achieved, indicates that there is a real need for some new ideas with a genuinely international basis for allocating and managing shared stocks.

### For more

K

www.bbc.co.uk/news/uk-scotland-highlands-islands-11295989

Britain Braced for a Mackerel War? BBC News Magazine

www.time.com/time/world/ article/0,8599,2014161,00.html

The Mackerel Wars: Europe's Fish Tiff with Iceland

www.seafoodsource.com/ newsarticledetail.aspx?id=4294998462

Science 'Cannot Address' Mackerel Row, Says Ecologist

www.worldfishing.net/news101/iceland-rejects-eu-mackerel-proposal

The EU-Faroe-Iceland Mackerel War

www.liu.is/english/

The Federation of Icelandic Fishing Vessel Owners

www.scottishpelagic.co.uk/

Scottish Pelagic Fishermen's Association

# **Small and Mighty**

The Banjul civil society declaration on sustainable livelihoods in African fisheries was adopted on 21 September 2010 in Banjul, The Gambia

rtisanal/small-scale fishers and associated civil society representatives from 17 African countries met in Banjul, The Gambia, on 21 September 2010, in advance of the meeting of the Conference of African Ministers on Fisheries and Aquaculture (CAMFA) on 23 September 2010.The meeting was organized by the Coalition for Fair Fisheries Arrangements (CFFA), the African Confederation of Artisanal Fishery Professional Organizations and the Commonwealth Foundation. meeting formed part of an ongoing process.

#### **Context**

- Noting previous statements on small-scale and sustainable fisheries made in the:
  - Kilifi Declaration of Intent (2007);
  - Civil Society Statements to the Commonwealth Heads of Governments Meeting (2007, 2009)
  - Bangkok Statement of Civil Society Organizations on Smallscale Fisheries (2008);
  - Windhoek Commonwealth
     Civil Society Statement
     on Sustainable Fisheries
     Management for Coastal
     Communities in Southern Africa
     (2008): and
  - Port of Spain Communiqué [paragraph 80] (2009);
- Endorsing the NEPAD Action Plan for Development of Fisheries and Aquaculture adopted in 2005 by Ministers at the Fish for All Summit held in Abuja, Nigeria, in 2005; as well as the FAO Code of Conduct for Responsible

Fisheries, in particular, section 6.18 pertaining to artisanal and small-scale fisheries;

- Recognizing the ongoing process set up by artisanal fishing organizations which led to the creation of a pan-African artisanal and small-scale fishing organization body;
- 4. We concur with observations made during the meeting of experts on fisheries and aquaculture held

...there is a need for political, institutional and economic reform when addressing issues of fisheries in Africa.

in Banjul, The Gambia, 20–21 September 2010 that there is a need for political, institutional and economic reform when addressing issues of fisheries in Africa.

5. In light of this, artisanal/small-scale fishers and associated civil society organizations call for urgent action by African governments to support development and decision-making processes related to the artisanal fisheries sector through the direct engagement of fishworkers, their professional associations and other civil society organizations in educational and research institutions.

#### Issues

Following detailed work by the working groups and a plenary

This declaration was adopted by civil society representatives on 21 September 2010 in Banjul, The Gambia discussion, the following statements were agreed by civil society and community-based artisanal and smallscale fishing organizations.

Civil society and community-based artisanal and small-scale fishing organizations are currently suffering from the effects of climate change, industrial fishing and illegal unreported and unregulated (IUU) fishing through dwindling catches, displacement of communities and the destruction of fishing grounds, which, in turn, affects the social stability of entire regions.

The current purely economic approach, which seems to be used by some African governments, represents a threat to the sustainable development of fisheries resources and livelihoods of poor marginalized artisanal and small-scale fishing communities.

Participants highlighted the large number of positive sustainable benefits derived from artisanal/small-scale fishing activities, including food security, creation of jobs and social stability. Artisanal/small-scale fisheries need to be given a much higher developmental priority compared to industrial fishing.

The contribution of the artisanal and small-scale fisheries sector to national economies has been highlighted in the 2007 article by Daniel Pauly, titled "Small but Mighty". For example, the small-scale and artisanal fisheries sector creates employment for over 12 mn people, compared to the approximately half a million employed in the industrial fishing sector. In addition, the capital cost of a job on fishing vessels in small-scale sector amounts the approximately US\$250-2,500 compared US\$30,000-300,000 for industrial fishing; each million dollars invested in fishing vessels creates around 500 to 4,000 jobs in the artisanal fishing sector, compared to five to 30 in the industrial fishery. Furthermore, annual catch figures for human consumption from artisanal/smallscale fisheries total approximately 24 mn tonnes, compared to 29 mn tonnes for industrial fishing. Even though the examples presented are global figures, we believe they are also applicable, pro rata, to African economies.

The NEPAD Action Plan for Development of African Fisheries and Aquaculture confirms the vital contributions of the fisheries sector to food security for 200 mn Africans, while also providing income for over 10 mn people engaged in fish production, processing and trade. The Plan also notes that these benefits come at some risk as the exploitation of natural fish stocks is reaching its limit.

### Recommendations

Civil society and community-based artisanal and small-scale fishing organizations are mindful of the action points in the 2005 NEPAD Action Plan for Development of Fisheries and Aquaculture and we reiterate our commitment to working in partnership with African governments and other stakeholders in the implementation of the plan.

We encourage African governments and other stakeholders to work with fishing communities to develop a global strategy to protect and promote the interests of all artisanal and small-scale fishing communities and to support our actions at the level of the FAO Committee on Fisheries (COFI).



Representatives from Liberia and Sierra Leone discussing the contents of the Banjul Declaration, made on 21 September 2010 in Banjul, The Gambia

We also recognize and support the role of the media in helping to raise awareness, promote transparency and convey the voice of the artisanal and small-scale fisheries sector.

Acknowledging the contribution of artisanal/small-scale fishing organizations to national development, we call for:

- a. greater integration of artisanal/ small-scale fishing and civil society organizations in the decisionmaking process and monitoring, control and surveillance as members of governmental, regional and international fishing-related bodies and projects;
- b. more transparency and free public access by the artisanal/small-scale fishing communities to information and funds pertaining to fisheries and marine resources management (including, inter alia, scientific data, licensing and fisheries agreements);
- the support of governments for the development of an international instrument to protect the rights of the artisanal and small-scale fishing communities throughout the world;
- d. concerted efforts from African governments and the international community in securing access rights to fish resources, postharvest rights, fair market prices and human rights, in particular, gender equity;
- e. greater recognition of the contribution of fishing communities to the food security, economic, political, social and cultural fabric of African countries; and
- f. support from governments and the international community in capacity building, education, health, communications and infrastructure for artisanal/ smallscale fishing communities.

We undertake to engage various actors in the pursuit of the aforementioned goals and actions, in particular, through the organization of an international conference, to ensure that future generations of artisanal/small-scale fishing communities continue to benefit

- ADEPEG-CPA, Mamayawa Sandouno,
  Guinea
- Agence de Presse Sénégalaise (APS),
   Assane Dème, Senegal
- Alvaro Eresfache, Togo
- CAOPA/FNP, Sidahmed Ould Abeid, Mauritania
- CAOPA, El Hadji Abdoulay Coume/ Chérif Younous Ndiaye, Senegal
- CAOPA, Gaoussou Gueye, Senegal
- CAOPA/FENACOPECI
- Gnaba Egni Léon, Côte d'Ivoire
- CERAD International, Yovo Komla
- CITA, Alfu El Haji Sene Cisse, Guinea-Bissau
- CITA, Osman Balde/Ibrahim Kebe, Senegal
- CITA, Pape Sacko, Mali
- Coastal Links, Christian Adams, South Africa
- Daily Newspaper, Saikou Jammeh, The Gambia
- Dawda F. Saine, The Gambia
- Eco-Ethics, O Keyo Benards, Kenya
- El-Molo Forum, Christiana Saiti Louwa, Kenya
- Fenapeche, Eustache Allaro, Benin
- FPT/CAOPA, Paul Amouye, Togo
- GAMFIDA, Baboucar Boyang, The Gambia
- Gunjur Environment Group (GEPADG)/ Commonwealth Human Ecology Council (CHEC), Badara N Bajo/Pa Ebrima Kunta/Amie Seka Touray, The Gambia
- ICSF, Mamadou Niasse, Senegal
- Jade/SYFIA, Etienne Tasse, Cameroon

- Journalist, Wudie Bakie Konwa, Sierra Leone
- Kalipso/Oceanyka, Vassen Kauppaymuthoo, Mauritius
- LAFA, Annette Johnson/ Alfred Ni Kawreh/ Theresa Gaway, Liberia
- Liberia Artisanal Fisheries Association (LAFA), Fojama Joe Brown, Liberia
- Masifundise, Naseegh Jafeer, South Africa
- Pechecops, Ahmed Mahmoud Cherif, Mauritania
- REJOPRAO, Adama Mane, Guinea-Bissau
- REJOPRAO, Emeka Umejei, Nigeria
- REJOPRAO, Inoussa Maiga, Burkina Faso
- REJOPRAO, Jedna Deida, Mauritania
- REJOPRAO, Lamissa Sangare, Mali
- REJOPRAO, Mama-Adama Keïta, Guinea
- REJOPRAO, Naby Zakaria Bamgoura, Guinea
- REJOPRAO, Papa Adama Mbodji, Senegal
- ROPA-GVB, Malam Dabo, Guinea-Bissau
- SLAFU, Thomas Spencer/Thomas O' Turay, Sierra Leone
- Tedak Fisheries Cooperative of Nigeria, Ahmed A Muhammed, Nigeria
- The Voice Newspaper, Amadou Bali, The Gambia
- TVM+, Soya Watt, Mauritania
- UNPAG / CAOPA, El hadj Issiaga Daffe, Guinea

from inland and marine fisheries Tresources, which are our common heritage.

This Statement is endorsed by all the civil society and community-based artisanal and small-scale fishing organizations listed in the box.

## For more

K

www.camfa-cso.org/EN/

Our Fish, Our Future, Civil Society Organizations Portal

www.nepad.org/foodsecurity/fisheries/about

**NEPAD-Fisheries** 

# **Building Partnerships**

The case of the Red Sea marine fisheries in Sudan shows how fishers' rights can be strengthened through partnership building, adaptive management and ecosystem approaches

ow small-scale fisheries can best be supported by the international community is an issue that is currently been tackled by the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO). The task of COFI is to identify international mechanisms that can help sustain small-scale fisheries, and this has been shaped by recommendations made at the Global Conference on Small-Scale Fisheries

- eradicate industrial fishing in the coastal zone;
- protect key fishery ecosystems (mangroves, river mouths, estuaries);
- regulate fishing gears and establish closed seasons; and
- establish fishery management plans developed and implemented jointly with artisanal fishers.

The Costa Rica Declaration and the recommendations from the Bangkok 4SSF assert that the human rights of fishing communities are indivisible for responsible and sustainable fisheries to be achieved, and crucial for the political, civil, social and cultural rights of fishing communities to be guaranteed. How this can be achieved and operationalized for small-scale fisheries is a major challenge for many governments. Some States fear that the freedoms endowed in human rights will undermine the current system of management that allocates rights through licensing or creates marine protected areas (MPAs), while others see human rights as a threat to State control and could destabilize authority over fishing communities and their resources.

The Costa Rica Declaration and the recommendations from the Bangkok 4SSF assert that the human rights of fishing communities are indivisible for responsible and sustainable fisheries.

(4SSF) that took place in Bangkok in October 2008 as well as a series of workshops convened this year in Asia, Africa, Latin America and the Caribbean.

The Bangkok 4SSF Conference highlighted the principles of human rights as a critical factor in achieving sustainable development of small-scale fisheries, and this has recently been reaffirmed in a Civil Society Declaration presented by CoopSoliDar to the FAO at the Costa Rica workshop (see "Beyond Bangkok", page 41), which calls for States to:

- recognize the full and effective participation of fishing communities in sustainable fishing;
- recognize access rights to land and water;
- optimize societal benefits through an ecosystem approach;

### **Ecosystem approach**

In the light of these issues, an intervention funded by the European Union (EU) in the marine fishery sector of Sudan is insightful and illustrates the benefits of promoting human rights within small-scale fisheries. The project applies an ecosystem approach to fisheries (EAF) through co-management, and shows that where there is meaningful participation of fishing communities in

This article is by **Gareth Johnstone** (garethmjohnstone@yahoo.co.uk), a PhD from King College who has researched property rights and social capital in Mozambique, and **Rouja Johnstone** (roujaj@hotmail.com). johnstoneconsult.eu

fishery governance ,it can strengthen fishers' rights and provides fishers with greater freedom to participate in sustaining and managing their fisheries.

Sudan is situated in northeast Africa and is the largest and one of the most diverse countries in Africa. It constitutes just over 8 per cent of the African land mass and its varying climatic and habitat zones are reflected in its diverse ecosystems, which range from tropical rainforests the south, to semi-tropical savannah and arid zones in the north. The least known and arguably least understood of its ecosystems is the marine tropical ecosystem, represented by the Red Sea that provides important livelihood opportunities for coastal populations from fishery resources, tourism, transportation and petroleum exploration.

The Red Sea forms part of the Rift Valley and is a narrow waterway running south-eastward for some 2,000 km, with an average width of 280 km. It represents a complex and unique tropical marine ecosystem with high biodiversity and a high degree of endemism. The Red Sea is shared by 10 coastal States, including Sudan, and is recognized as a Global 200 ecoregion as it contains geographically distinct assemblages of natural communities and species. Sudan has jurisdiction over 750 km of the coastline, from Egypt in the north to Eritrea in the south, and has an exclusive economic zone (EEZ) that covers an area of 91,600 sq km, including a shelf area of 22,300 sq km.

Sudan's coastline is characterized by lagoons fringed by mangroves and seagrass beds, and its coral reefs are regarded as the most diverse in the Red Sea, with fringing, outer barrier reefs and atolls. Despite small tidal variations (0.5 m), weak currents, low nutrient upwellings, high water temperatures (20-33°C), high salinity (39-56 per cent) and no permanent freshwater runoff, Sudan's Red Sea supports an estimated 200 species of soft and hard coral, 300 bony fish species, over 50 species of sharks and rays, and 1,000 species of

invertebrates. The coast also functions as an important feeding and breeding ground for the endangered dugong and sea turtle as well as for migratory and residential birdlife.

Fishing operations are conducted mainly by small-scale producers within the nearshore inlets and fringing reefs using traditional gear, craft and fishing methods. The main gears are handlines and gill-nets that target reef-associated fish species that account for 80 per cent of the 1,500-tonne annual catch. The locally constructed wooden

The Red Sea is shared by 10 coastal States, including Sudan, and is recognized as a Global 200 ecoregion as it contains geographically distinct assemblages of natural communities and species.

and fibreglass open boats are powered by sail or outboard motor, with the majority of the approximate 600 vessels five to seven m in length and used by an estimated 2,000 fishers.

Fishing communities consist of indigenous people known collectively as the Beja. The Beja are an ancient nomadic tribe of Hamitic descent who have occupied the eastern desert region of Sudan, Eritrea and Egypt for over 4,000 years. Fishing does not have a long tradition in the Beja culture, and it is seen as a seasonal subsistence activity, contributing to a livelihood based on pastoral and agricultural activities.

#### Low consumption

domestic demand for products is weak and the market small, which constrains the growth of fishery businesses. Sudan has one of the lowest annual per capita consumptions in the region, at 1.4 kg per person, compared to 14.2 kg in Israel, 9.9 kg in Saudi Arabia and 25.1 kg in Yemen. Despite fishing being an important source livelihood to coastal communities, its contribution to the gross national product (GNP) is small, estimated at less than three per cent, with the main contributors coming from marine transport and petroleum.

Mechanisms to engage fishers in the fishery sector in Sudan were first introduced over 20 years ago, when co-operatives were set up to assist two projects supported by FAO and the United Kingdom's Overseas Development Institute (ODI). Both interventions worked through the Red Sea State's Fishery Administration to increase fishery production, and functioned by subsidizing inputs such as new equipment, fuel and ice, and by guaranteeing the purchase of fish for low-cost sale and distribution. Although the co-operatives facilitated project activities, they had limited impact in promoting fishers' rights or engaging fishers in governance issues.

Since the late 1980s, the fishery sector has seen little investment and support, which has resulted in a contracted public services and budget, loss of experienced staff, poor physical infrastructure and weak institutional capacity. With limited support from the State, the fishers' co-operatives collapsed and fishers have become dependent on local traders for all inputs (ice, food, fuel, loans), with repayments schemes that have kept them in debt. Fishing communities have few opportunities to promote rights, influence policy or participate in fishery management, which is compounded by continued low incomes and production.

To address the sector's malaise, the EU intervention has built a consensus

GARETH JOHNSTONE

A Sudanese fishermen with a sea cucumber. Participatory fisheries stock assessment (ParFish) helps estimate stocks of sea cucumber and other fish species

on the key management objectives for the fishery, and has developed partnerships between the State, traders and fishers. The Red Sea Fishery Co-ordination Group (RSFCG) has been set up under the State Ministry of Agriculture and functions as an advisory forum representing State institutions responsible for fishery resources. Representation includes the Red Sea University, the Fishery Administration, Fishery Research Institute, Ministry of Planning and Finance, Humanitarian Aid Co-ordination (HAC) and security agencies. The RSFCG has set up several co-management groups, which has required the State, private sector and fishing community to share responsibility for fishery management.

Engaging fishing communities in fishery management also involves building capacity, and this has been addressed through a programme of experimental fishing. New fishing technologies and techniques, such as longlines, fish traps, handreels, hooks, global positioning circle systems (GPS) and fish finders have been tested and data collected on the fishery and its users. This has included participatory fisheries stock assessment (ParFish) that has raised awareness and facilitated discussions on fishery management. The approach is bringing together government institutions, fishers and traders to test, collect and analyze fishery data, and is promoting the rights of fishers within the sector to determine the best fishing regimes to sustain the fishery.

A co-management group, representing fishers, traders, scientists and managers, has been set up to address the management of reef-associated finfish, and it agreed to apply management measures through the market to limit fishing effort during the spawning season of certain commercial species.

### Sea cucumber fishery

The co-management arrangement for the sea cucumber fishery is currently providing the management model for Sudan. Commercial fishing for sea cucumber was stopped in 2009, based on evidence provided to Sudan by the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA). The decision to close the fishery created tensions and led to a workshop where broad management objectives were identified and a roadmap tabled that set out how to improve sea cucumber management. The roadmap presented a 10-point plan in which the ban on harvesting sea cucumber would be lifted if there was an agreement between traders, fishers and the State to set fishing effort limits and to work collaboratively to collect and share data during an experimental one-year harvest.

The Sudanese sea cucumber fishery has agreed to limit the number of traders and fishers engaged in the fishery as well as the location and period of the harvest. The process has involved the registering and marking of fishing boats and the licensing all fishers. The traders are supporting the initiative by funding the costs of government observers to remain in each of the processing camps to gather data. This has led to improvements in processing such as a ban on using mangrove wood and setting limits on the size and species harvested. The State is now collecting catch data and gaining a better understanding of the operational costs and benefits of the fishery. This arrangement means that the management costs and benefits are shared by members of the partnership and they have identified measures that can address marketing, production and equity concerns.

Importantly, the security agencies are engaged in the partnership process, despite initial reluctance. The security agencies are federally managed and monitor all movement and activities in the Red Sea State. This includes a requirement by all fishers to obtain maritime access licences before going to sea. The partnership approach has engaged the security agencies and encouraged them to share some of this responsibility with other stakeholders, including fishing communities. The Sudan case illustrates the importance of creating formal mechanisms in which fishing communities can effectively participate in sustaining and managing their fisheries. Such mechanisms need to be combined with capacity building and dialogue between fishers, scientists and government that raises awareness and understanding about the fishery ecosystem and enables knowledge to be shared. Combining adaptive management with partnership building allows different fishing regimes to be tested so that the decisions are transparent and based on shared data and so that control measures employed can be identified and agreed on by all stakeholders.

The Sudan case highlights the importance of human rights and the implicit recognition by government institutions that fishery management cannot be implemented solely by the State...

The Sudan case also highlights the importance of human rights and the implicit recognition by government institutions that fishery management cannot be implemented solely by the State, and that fishing communities and traders are central for responsible and sustainable fisheries to be achieved. The partnerships and mechanisms established have not undermined rights-based management through new freedoms to fishery resources but rather have reinforced such approaches. Furthermore, they have not destabilized government authority but, arguably, have strengthened the State's role in facilitating effective and good governance in the small-scale fishery sector.

### For more

Ъ

www.fao.org/fishery/countrysector/ FI-CP\_SD/en

**Sudan: FAO Country Profile** 

marf.gov.sd

Ministry of Animal Resources and Fisheries, The Republic of The Sudan

## The Write Stuff

The website of Comité Local des Pêches Le Guilvinec, the local fisheries committee of Le Guilvinec in France, celebrates its second anniversary and a treasure of over 600 articles

ays Bigouden is a small territory of 400 sq km, with a population of 60,000, whose ancestry can be traced to the Neolithic Age, and whose main occupation is still fishing. Around 1,000 fishermen live in Pays Bigouden today, and 4,300 jobs can be directly linked to fishing activities, with 250 boats landing 40,000 tonnes of fish. Fishing can be divided into three categories near the coast: small-scale fishing vessels (5 to 10 m overall length),

The principal aim of the Committee's website is to be in direct touch with all its fishermen members.

between 15 and 50 nautical miles coastal/ inshore fishing vessels (12-18 m overall length) and off shore fishing vessels out to 200 nautical miles (20 - 24 m overall length). Over 200 of the boats belong to boatowner-skippers, while the rest belong to local small shipowners.

The Comité Local des Pêches Le Guilvinec, the local fisheries committee of Le Guilvinec, was officially established in 1946, and is now governed by a French law of 1991. Under that law, local committees are regarded as institutions comprising trade unionists and shipowners (thus assuring the representation of both fishermen and shipowners), which have to ensure that a general election of fishermen takes place every four years. Funding for the Committee comes from a compulsory special

tax paid by the fishermen. The Committee's mission is to defend the fishermen's main interests, which means safeguarding their social, economic and human rights. Given this mandate, the Committee's elected members are always seeking ways to circulate information both within the Committee and beyond, so as to reach as many fishermen as possible as well as society at large.

During the 1980s and 1990s, the Committee published a quarterly newspaper called *Kelaouen Ar Mor*, in the Breton language, and another called *'News from the Sea*, in French. But by the start of 2000, *Kelaouen Ar Mor* had to wind up for financial reasons. The Committee then turned to the local media to disseminate information. Though this method continues, it has its drawbacks: limited space in newspapers, and a disinterest among journalists for subjects regarded as important by the Committee.

In 2008, the Committee decided to turn to the simple, cheap and efficient media of the Internet. Since its launch, the Committee's website (www.comitedespeches-guilvinec.fr) has attracted more and more visitors—from a few hundred hits per page to several thousands each month.

### **Members' contribution**

The principal aim of the Committee's website is to be in direct touch with all its fishermen members, and to remind them that each one contributes financially to the professional organization through a tax raised by the State. The tax is a levy of 0.86 per cent on the gross sales

This article, by **Rene-Pierre Chever** (rene-pierre.chever@wanadoo.fr), General Secretary, Le Comité des Pêches Le Guilvinec and a Member of ICSF, was translated by Daniel Le Sann made by each boat in Pays Bigouden. This tax is paid back to the Committee each year, in a number of instalments. The Committee tries to ensure that each paying fisherman gets daily information on the actions taken in their name. The website builds up trust among the fishermen, who regard it as a sort of mirror that highlights their life and work at sea, and helps them prepare for the future.

The second objective of the site is to fulfil a condition stipulated by the law of May 1991. Article 5 says that local committees should take actions in the economic and social spheres for all the members, especially with regard to information.

forthcoming The Law Modernization of Agriculture and Fishing, which will be promulgated at the beginning of 2012, proposes, in Article 21, that fishing committees create for fishing companies and their employees a 'Mission of Information and Counsel'. The French State has a strong insistence on the circulation of information, and it believes that only informed fishermen can be the basis for any new policy being acceptable. It may not be very judicious for a State to insist on the need to inform since citizens may use information to contest the State's actions and organize passive or active resistance against it. However, it is a matter of pride that French law makes possible the guaranteed spread of information.

The third aim of the Committee's website is to convince the public at large that in Europe fishing still has a future, as exemplified in France by the fishermen of Pays Bigouden. Globally, there is a stereotyped notion, especially among politicians, that fishing is an 'ancient' activity no longer relevant to our 'modern' society. As one World Bank executive said in 2008 in Bangkok: "Fishing no longer exists in Europe; it has only become a vast market for fish products from rest of the world". phantasmagorical vision is fuelled by the recent European policy of emptying fishing ports by paying large sums of money for destroying or decommisioning boats. The mayors of the fishing ports of Pays Bigouden



The newsy website of the Comité Local des Pêches Le Guilvinec, France, launched in 2008, strengthens relations between fishermen

put all their energy into tourism and marinas, though fisheries can generate ten times more jobs than tourist boats.

Some environmental NGOs have joined the fray, considering fishermen as predators of marine resources and enemies of marine habitats, who should be eradicated as soon as possible.

Fresh actors, often with powerful new rights, can now be seen at sea. Among them can be ranked the environmentalists who champion marine protected areas (MPAs); companies willing to put up wind energy units in the open sea; sand miners who excavate sand for the construction industry; and waste disposal outfits, among others.

### Fight for a future

In the face of such a multipronged assault on their resource base, fishermen and their organizations have to fight for a future. They must show they are able to manage their resources themselves, having lived close to the marine environment and culture. They must make others understand that fishermen contribute food sovereignty in France, and, guardians of an unrivalled maritime culture, they are better placed to make sure that territories linked to the sea sustain their own resources with integrity. In this regard, over the past two years, the Committee has helped give fishermen a better image.

The fourth objective of the Committe's website is to strengthen relations between fishermen and to increase its links with other like-minded sites, like the Regional Committee of Sea Fishing, the Committee of Labour Market Area, the Coalition for Fair Fisheries Arrangements (CFFA), the Collective Pêche et Développement and L'Encre de Mer.

The website relies on frequent updation. Each day sees a new report on the site. The site's writers attend fisheries meetings, meet fishermen, environmentalists, civil servants, State representatives, members of MPA agencies, and elected members of the European Parliament. With so many issues to choose from, the only problem is meeting deadlines. The site reflects the direct link of the Committee with the fishermen. The style of writing is informal, instinctive and journalistic, shunning the academic essay form, in preference for brief, direct sentences and short paragraphs. The site is more like a daily newspaper reflecting the real lives of fishermen and making visible the existence of those working far from land. It echoes the rhythm of the fishermen's workday. At dawn, new text, videos and photos must be up with subjects that concern them directly.

The Committee's general secretary was the first to don the mantle of journalist. He was soon joined by young project leaders, each specializing in one topic. Though few fishermen themselves write, those who do can often be scathing and original, speedily reaching the core of the subject. Some of the Committee's elected members have also had a hand at writing for ths site. All contributors keep in mind the essential journalistic questions: Who? What? When? Where? Why? How?. They use catchy headlines, arresting introductions, and short paragraphs that lead to a conclusion. Lured by the satisfaction of seeing their work on the site, over the past two years, some fishermen have begun taking photos of everything at sea: working activities, fish, birds,

other boats, the sea, storms, the sky, nature in all its glory.

The Committee's website has been designed by a young team, Torr-Penn Production, using the free opensource software called SPIP (Système de Publication pour l'Internet Partagé or Participatif), which is a content management system designed for website publishing, oriented towards online collaborative editing. True to the princples of free software (see www. fsf.org), SPIP encourages collaboration and community participation. With this software and an Internet server, the Committee's site was up and running at a cost of a few hundred euros. Daily updating is automated, leaving the writers to concentrate on content. Today the site attracts nearly 10,000 unique visitors each month.

The articles on the site are often critical of the authorities and can sometimes upset administrations or local powers, since they always state the fishermen's point of view, however caustic. To avoid litigation, articles are vetted by the president or vice-president of the Committee and by the elected representatives. Potentially controversial are revised, sometimes based on comments from friendly outsiders. Readers' responses to articles are published, even if they counter the writer's point of view. Sixty such responses to around 600 articles have been published on the site so far.

Going by the experience of Comité Local des Pêches Le Guilvinec, it is possible to imagine a future network of websites run by fishermen or their organizations that would offer a worldview to complement the dominant discourse on fisheries.

### For more

K

www.peche-dev.org/

Collectif Pêche et Développement

comitedespeches-quilvinec.fr/

Comité Locale des Pêches Le Guilvinec

## Frankenfish Salmon

The United States is close to approving genetically engineered salmon in what could well turn out to be a global problem

he United States Food and Drug Administration (FDA) announced on 25 August 2010 that it is considering approval of a genetically engineered (GE) salmon for human consumption, which would make it the first GE animal in the world to enter the food supply chain. Approval of this transgenic salmon is extremely problematic for fishing communities and consumers in the US and around the world.

The Atlantic salmon in question has been genetically engineered by AquaBounty Technologies to produce growth hormones year-round, which, the company claims, will make it grow twice as fast. This is done by artificially combining growth hormone genes from an unrelated Pacific salmon (Oncorhynchus tshawytscha) with deoxyribonucleic acid (DNA) from the anti-freeze genes of an eelpout.

AquaBounty plans to fertilize their GE salmon eggs on Prince Edward Island in Canada, grow out the salmon in contained inland tanks in Panama, and then process and ship the fish back to the US for consumption. While these conditions were submitted for original approval of their GE salmon, this is clearly just the beginning for AquaBounty. As the company's chief executive officer proclaimed at a public FDA hearing, they fully intend to expand operations in the US and around the world, particularly close to population centres. Even so, the FDA is now only looking at the environmental threats from current Canada-Panama-US operations instead of the cumulative environmental impacts from AquaBounty's fullscale commercialization plans. Each operation on its own may have individualized and locally specific risks but if you look at the big picture, the environmental harms are far-reaching and significant.

The FDA is hoping to approve this GE salmon for human consumption under a questionable process intended for new animal drugs instead of a new food. This new animal drug approval process limits the amount of data that is released to the public since AquaBounty can claim that much of the GE salmon data is proprietary and, therefore, must be kept secret. Additionally, any new facility the

Approval of this transgenic salmon is extremely problematic for fishing communities and consumers in the US and around the world.

company hopes to raise fish in, if approved, can be built later as a new drug manufacturing facility with even less environmental review.

### **Biodiversity problems**

GE salmon could pose serious threats to biodiversity and, in particular, to the viability of wild Atlantic salmon, should they escape from production facilities. Salmon regularly escape from aquaculture facilities, interbreeding with wild salmon, and diminishing the fitness of the wild populations. In fact, Atlantic salmon were placed on the endangered species list in the US due, in part, to genetic and fitness impairments caused by inbreeding with farmed salmon escaping from net

This article is by **Eric Hoffman** (EHoffman@foe.org), Biotechnology Policy Campaigner, Friends of the Earth, United States of America

pens. If salmon genetically engineered to grow faster than wild fish escape confinement, they will threaten the health and survival of wild salmon populations. According to research from Purdue University, if just 60 GE fish were released into a wild population of 60,000, the wild population could be extinct within 40 generations. This result is driven by the 'Trojan gene effect' in which specific fitness advantages in an

The human health impacts posed by GE salmon approval is also a pressing concern.

otherwise less fit organism result in gene spread and an ultimate weakening and eventual collapse of the species. Similarly, another study published by the Canadian government in 2004 showed that natural and GE salmon located together in the laboratory under conditions of low food availability led to population collapse and eventual extinction of the entire study population because GE salmon are more aggressive and sometimes resort to cannibalism. The effect that hungry and aggressive GE salmon could have on natural ecosystems and local

ERIC HOFFMANN/FOE

OMG!

WRONG

GENES

Just Say No To FrankenFish

STOP

ALLION

STOP

ONG HORSE

Station

Stat

A rally organized by Friends of the Earth US, the Centre for Food Safety, Food & Water Watch, and Ben & Jerry's Ice Cream, which demanded that GE salmon be not approved

food chains in the wild has not been studied.

AquaBounty claims that their fish will be sterilized, but even their own data admits that up to five per cent of the eggs may remain fertile. AquaBounty claims to have orders for 15 mn eggs. That means that right off the bat, we may have up to 750,000 fertile fish that could escape and wreak havoc on the environment. Even more troubling is the fact that AquaBounty will still need fertile males and females to fertilize their genetically engineered salmon eggs.

The human health impacts posed by GE salmon approval is also a pressing concern. One consequence of government approval of these GE salmon would likely be the use of even more antibiotics in the aquaculture operations used to raise the fish, increasing the threat of developing drug-resistant bacteria. Farmed salmon are given more antibiotics than any other livestock by weight, and GE salmon may require even more antibiotics, since AquaBounty's fish would be less fit due to its constant production of growth hormone, making them even more susceptible to disease.

In addition, scientists have raised concerns about the fact that the physical properties of GE animals—such as jaw erosion, tissue inflammation, high levels of growth hormones and low levels of healthy fatty acids—could make them unsafe to eat. However, neither AquaBounty nor the FDA has made the transgenic fish available to independent experts for safety testing. Without such testing, it is irresponsible for the FDA to say these fish are safe to eat.

GE fish are not a problem for the US alone. As mentioned, AquaBounty will be exporting its environmental risks to Canada and Panama for their initial operation. It then plans to expand with grow-out facilities near cities around the world.

### More plans

Additionally, salmon are just the beginning. AquaBounty also has plans to seek approval of GE tilapia, rainbow trout and arctic char that have

combined traits for supposed faster growth and tolerance to cold and disease.

The rise of GE fish would mean a further rise of industrial fish farming and the decline of family fisherfolk and fishing communities around the world. The traits being engineered into these fish are not 'public good' traits such as improved nutrition or decreased environmental impact.

On the contrary, the traits AquaBounty is selecting for GE salmon are meant to boost the company's profits and will lead to a further industrialization of the fishing industry.

Faster-growing, cold-tolerant and disease-resistant GE fish only make sense at the industrial scale. It allows for more fish to be crammed into cages or nets and AquaBounty can charge more for their roe and walk away with the profits while the environmental harms are exported to other communities.

Unsurprisingly, these GE fish are patented and owned solely by AquaBounty. Fish farmers could buy eggs from the company, but they would not own the fish or their traits any more than a corn farmer owns her crops grown from seeds bought from Monsanto.

What happens when these GE fish escape and mate with, or displace, wild populations? If the analogy to crop patents holds true, AquaBounty would own any fish that escape into open oceans or any of their offspring. They could also sue fishers for patent infringement if they happen to catch these fish out in the wild or accidentally breed them.

Fortunately, a final decision by the FDA has not yet been made, and citizens are rising up to pressure the FDA to reject the approval of AquaBounty's GE salmon. The FDA received 171,645 comments from the US public demanding that this fish not be approved for human consumption. signed by over Letters environmental and public health organizations, chefs, restaurants and tribal communities were submitted to the FDA, asking that it deny approval of this GE salmon.

#### **Act Now!**

Call or write the FDA today using the contact information below and tell them the world says "No!" to GE salmon!

FDA's Center for Veterinary Medicine Phone: 240-276-9300 Email: AskCVM@fda.hhs.gov

### Address:

Communications Staff (CVM)
Food and Drug Administration
7519 Standish Place
HFV-12
Rockville, MD 20855,
United States of America

A rally organized by Friends of the Earth US, the Centre for Food Safety, Food & Water Watch, and Ben & Jerry's Ice Cream was held outside the White House demanding that President Barack Obama tell his administration not to approve this dangerous fish.

AquaBounty's salmon would be the first GE animal approved for human consumption anywhere in the world and would set a terrible precedent. Not only does AquaBounty have other GE fish in the works, there are also other corporations working with GE animals, such as GE pigs with less phosphorus in their waste or cows engineered to be immune to mad cow disease, which are waiting to move forward with their proposed GE animals based on what happens with AquaBounty's GE salmon application.

The FDA needs to hear from fishing communities around the world who would be affected by a fishing industry dominated by GE and other expensive, unproven, untested and unregulated technologies.

Governments around the world must make it clear that it is inappropriate and irresponsible for the US government to approve GE salmon for consumption in the US while exporting the environmental harms to other countries, and that those governments will not allow these GE fish operations to threaten their wild fish populations or farming communities.

### For more

R

www.salmonnation.com/fish/gefish.html **GE Salmon** 

www.aquabounty.com

**AquaBountry Technologies** 

www.fda.gov/NewsEvents/ PublicHealthFocus/ucm224089.htm

Public Meetings on Genetically Engineered Atlantic Salmon

## **Trawl Brawl**

Indian and Sri Lankan fishermen have evolved a formula for co-existence in the Palk Bay, which has long been the arena of conflicts over transborder fishing

This was the ultimatum that fishermen from the Northern Province of Sri Lanka gave their counterparts in the Indian State of Tamil Nadu, when representatives from both countries met in Chennai during 22 - 24 August 2010 to evolve a formula that would enable them to fish together peaceably in the Palk Bay and Palk Straits.

In an 'agreement', the Indian fishermen consented—albeit reluctantly—to this one-year deadline and also to the following restrictions until trawling is finally stopped in the

Transborder fishing in the Palk Bay has been a major headache for Sri Lanka and India for nearly three

Palk Bay: (i) reduction of fishing days to twice a week, with an overall cap of 70 days in a year; (ii) maintaining a distance of three nautical miles from the Sri Lankan shore to avoid destruction of small fishing nets and corals; (iii) reduction of fishing time in Sri Lankan waters to 12 hours per trip; and (iv) establishing a monitoring and enforcement system on the Indian side that will punish violations. The agreement will be reviewed and further steps taken when Indian fishermen go to Sri Lanka for a 'return' visit in a few weeks time.

Transborder fishing by Tamil Nadu fishermen in the Palk Bay has been a major headache for both countries for nearly three decades. Since the start of the civil war in Sri Lanka in 1983, Tamil Nadu fishermen from the four districts adjoining the Palk Bay and Palk Straits-Ramnad, Pudukottai, Tanjavur and Nagapattinam—have braved arrests, detention and even bullets to fish in Sri Lankan waters. Over a hundred have lost their lives, caught in the cross-fire between the Tamil Tigers and the Sri Lankan Navy, while a few thousand have been arrested and spent weeks and months in Sri Lankan jails and detention camps. Hundreds of boats have been damaged or seized, forcing many a boatowner into bankruptcy. Yet, transborder fishing by Tamil Nadu boats continues unabated.

The present reality is the existence of a large fleet, severely constrained by several factors like declining catches, reduced profitability and limited number of fishing days, going into a frenzy on the 70 to 100 days it gets a chance to fish. Given that fishing grounds are limited (and depleted) on the Indian side, this fleet goes right up to the Sri Lankan shore where the shallow waters are extremely rich in fish resources. They do in Sri Lankan waters what may be unacceptable in Indian waters. This is clearly a failure of fisheries management.

### The ARIF network

It is in this context that a goodwill mission of Indian fishermen was organized in May 2004 by the Alliance for Release of Innocent Fishermen (ARIF), a network of Indian trade unions, fishermen's associations and non-governmental organizations

This article is by **V Vivekanandan** (vivek.siffs@gmail.com), Adviser, South Indian Federation of Fishermen Societies (SIFFS), and Member, ICSF

decades.

(NGOs) that works to help fishermen of both countries who are arrested for crossing the maritime border. ARIF is supported by the South Indian Federation of Fishermen Societies (SIFFS). The mission also had the collaboration NGOs in Sri Lanka, including the Fisheries Solidarity National Movement (NAFSO) and the Social and Economic Development Centre (SEDEC).

The May 2004 dialogue was significant in that it brought the trawl issue to the forefront and forced the Tamil Nadu trawlers to acknowledge that they have to think of a future in which trawling will be severely curbed or replaced with more ecofriendly fishing methods. It was also understood that the trawl fleet needed downsizing to survive in Indian waters. This led to the proposal of a 'buy-back' scheme, and many owners said they were willing to give up their trawlers for adequate compensation.

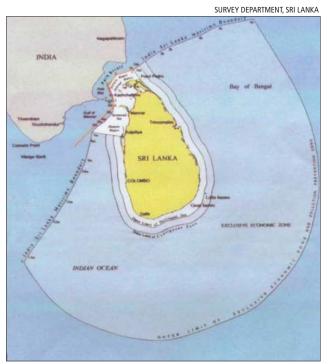
However, the follow-up of the May 2004 agreement was weak due to the Indian Ocean tsunami of December 2004 and the rehabilitation work in both countries. With the escalation of the civil war in Sri Lanka in 2006, many fishermen of the Northern Province became internally displaced persons (IDPs).

The end of the civil war in May 2009 signalled the start of a new phase—no longer could the transborder fishing issue be treated as a mere by-product of the war. As the fishermen of Sri Lanka's Northern Province gradually began reviving their fishing operations, conflicts with Indian trawlers surfaced once more. In mid-2010, two Indian trawlers were sunk by irate Sri Lankan fishermen off the Mannar coast.

Soon strong signals came from both sides that the 2004 dialogue should be resumed. This time, it would be the turn of the Sri Lankan fishermen to visit India. The Fisheries Minister of Sri Lanka himself strongly supported the idea of a dialogue and agreed to send observers along with the fishermen. The Tamil Nadu Fisheries Department also agreed to

send observers for the meeting.

24-member Lankan Sri delegation fishermen leaders from three districts (Jaffna, Killinochi and Mannar), NGO representatives, government observers and media persons arrived on 16 August 2010 at Trichy airport Tamil Nadu. Thev visited Rameswaram, Jagadapattinam, Kottaipattinam and Nagapattinam over a four-day period, conducted a series interactions of



Sri Lanka - India maritime boundary and zones.
Fishermen have braved arrests to fish in these waters

with local fishermen's associations and visited major fish landing centres in the Palk Bay. The field visits created great enthusiasm among the fishing communities in Tamil Nadu and also generated unprecedented media coverage. The leader of the Sri Lankan delegation, Soorya Kumar, a fisherman from Wadamarachi in Jaffna, stressed the strong bonds that linked the fishermen of both countries, even as he pointed out the unacceptable nature of the operations of Indian trawlers.

These meetings highlighted the Sri Lankan fishermen's plight and countered the one-dimensional impression of Tamil Nadu fishermen being the only victims. The responses Indian fishermen were the encouraging. The Rameswaram fishermen openly acknowledged the harm done to Sri Lankan fishermen by Indian trawlers. While acknowledging that it was their duty to find a fair solution, they also stressed the need for government support, compensation or alternative sources of livelihoods to compensate for abandoning trawling.

### Workshop

Following the field visits, a threeday workshop entitled "Fishing Together in the Palk Bay" began at the International Centre at St.Thomas Mount in Chennai on 20 August. Around 30 fishermen leaders from the four Palk Bay districts of Tamil Nadu attended the workshop.

The opening statements from representatives of both sides repeated some of the issues already highlighted at the field meetings, in some cases adding more nuances to the problem of transborder fishing. The second day was entirely devoted to evolving a formula for solving the problem. Both sides met separately to formulate their ideas. The Indian side was banking upon reviving the 2004 formula of continuing trawl operations in Sri Lankan waters under stringent restrictions while simultaneously working with the Government of India/Tamil Nadu to find a longterm solution to the trawl issue. The Indian fishermen were even prepared to reduce the number of fishing days a week from three to two. However, the Sri Lankan fishermen wanted trawling to be stopped completely in three months.

The Indian fishermen felt that the three-month deadline was an impossible one to meet. The Sri Lankans, on their part, maintained that in the absence of a reasonable deadline, there would be no pressure

The Indian fishermen finally agreed to a one-year deadline...

on Indian fishermen to approach their government for a solution. Indian fishermen had been asked to stop trawling as far back as May 2004 and six years have gone by without any change, it was pointed out. The Indian fishermen finally agreed to a one-year deadline, though without much clarity on how that would be met. More discussions would be held when the two groups meet next in Colombo. It was also hoped that the one-year grace period could be used to demonstrate that the Indian trawlers could operate in a responsible

manner without harming the Sri Lankan fishermen.

Once the deadline issue was settled, the details of the regulations on trawling for the one-year period were negotiated. This proved to be much tougher than anticipated. The first Sri Lankan offer was for Indian trawlers to continue fishing for three days a week but not beyond four nautical miles from the Indo-Sri Lankan maritime border. The Indian fishermen found this unacceptable as it would effectively shut them out from their usual fishing grounds closer to the Sri Lankan shore. They preferred an operational boundary of three nautical miles from the Sri Lankan shoreline, which would give them some catches and also ensure that the small fishing nets of the Sri Lankan fishermen were not damaged by trawl operations. In turn, they would reduce their fishing days.

After prolonged negotiations on the third day of the workshop, an 'agreement' was finalized and presented to the two groups in a plenary for signed approval. The chief guest for the final session was S.W. Pathirana, Sri Lanka's Director General of Fisheries. The Indian side was represented by K. Sellamuthu, Director of Fisheries of Tamil Nadu, who was present only as an 'observer'. Pathirana received the agreement on behalf of the Sri Lankan government and agreed to consider it within the framework of Sri Lankan law. The agreement itself was clear that the proposals "will be placed before the two governments for their consideration. The government decision will be final".

### Careful package

Clearly, for the agreement to work, the support of the two governments is needed. The Sri Lankan Navy will need to be vigilant but should not interfere with the operations of Indian trawlers as long as they keep to their side of the bargain. The Indian and Tamil Nadu governments will have to help Indian fishermen with a carefully developed package to resolve the trawler issue. The non-trawl fisheries may also need to be properly



The Sri Lankan delegation of fishermen leaders called for the cessation of trawling within three months. An agreement was finally approved with the Indian fishermen agreeing to a one-year deadline at the Chennai dialogue

managed to ensure equitable distribution of the Palk Bay resources between the fishermen of both countries. Only if both Indian and Sri Lankan fishermen co-operate can proper management of fisheries in the Palk Bay be ensured.

### For more

R

arrest-fishers.icsf.net

### **Arrest and Detention of Fishers**

nafsoonline.blogspot.com/2010/08/sri-lankan-tn-fishermen-talks.html

### **NAFSO Blogspot**

www.siffs.org/.%5CBooks%5Cfishing\_for\_favour.pdf

Fishing for a Favour, Netting a Lesson: Report of the Goodwill Mission

www.himalmag.com/read.php?id=4707 **Fishing for Solutions** 

## Tsunami Recovery

The tsunami that hit the Juan Fernández islands of Chile has tested the resilience of the traditional tenure system of the fishing community of the area

ome time in October 1704, the 16-gun buccaneer galleon Cinque Ports reached the uninhabited Más a Tierra Island, about 415 miles off central Chile, for restocking food and fresh water. There, sailing master Alexander Selkirk got into an argument with Captain Thomas Stradling about the seaworthiness of the vessel. Selkirk, an ill-tempered Scot, was left on the island with a musket, gunpowder, carpenter's tools, a knife, a Bible, some clothing and rope. He was rescued four years and four months later; his story inspired Daniel Defoe's fictional

spreading over approximately 230 miles in the east-west direction. The rough landscape of the islands, imposing beauty, consists of a mosaic of volcanic rock ridges densely vegetated ravines, harbouring rich endemic a flora. The islands were designated by Chile as a National Park in 1935, and by the United Nations Educational Scientific and Cultural Organization (UNESCO) as a World Biosphere Reserve in 1977, making them part of humanity's natural heritage. San Juan Bautista (population approximately 770), the only permanent settlement, is located on Cumberland Bay, facing northwards on the north coast of Robinson Island.

Most fishing activity takes place around Robinson Crusoe and Santa Clara islands. Eight to ten boats operate in Selkirk, where fishers stay with their families between late September and mid-May, while a few fishermen operate sporadically in the Desventuradas. The basic design of the 8-11-m doubleended fishing boats has been virtually unchanged since at least 1915 and may be traced to whaling during the 19th century. Most were built in Robinson Crusoe Island with local woods and are powered by 15-hp outboard motors. Traps are made of wood, and baited with a mix of white fish and moraine eel meat.

... the plentiful lobster stocks became the backbone of the economy of the island, or, more precisely, of the Juan Fernández archipelago.

character Robinson Crusoe. During his long period of isolation, Selkirk learned to make use of whatever resources were available to him—digging for roots, hunting feral goats and boiling lobsters.

Two centuries later, the plentiful lobster stocks became the backbone of the economy of the island, or, more precisely, of the Juan Fernández archipelago. Más a Tierra and Más Afuera (located 100 miles further offshore) were renamed as Robinson Crusoe and Alexander Selkirk Islands, honouring, respectively, the fictional character and his real-life counterpart. The islands correspond to the peaks of two members of an impressive chain of sea mounts that rises from abyssal depths in the southeastern Pacific,

This article is by **Billy Ernst** (biernst@ udec.cl), Departamento de Oceanografía, Universidad de Concepción. Concepción, Chile, **Julio Chamorro** (juliochamorro. solis@gmail.com) and **Pablo Manríquez** (pablo 10 andres 83 @hotmail.com), Sindicato de Trabajadores Independientes Pescadores Artesanales, Juan Fernández, Chile, and **JM (Lobo) Orensanz** (lobo @u. washington.edu), Centro Nacional Patagónico, Puerto Madryn, Argentina

### Modern fishery

Commercial fishing dates to the 19th century. The modern fishery took shape after a French company started to operate in 1914, largely as a result of the introduction of motors. Before 1959, fishermen were employed by the fishing companies (apatronados).

The last *apatronados* subsisted through approximately 1970; since then, all fishermen have worked independently.

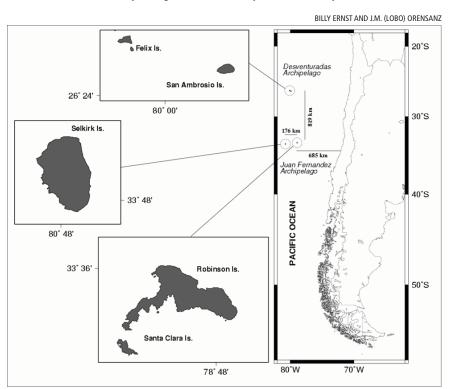
The first two vessels built to be owned by independent fishers were significantly named *Libertad* and *Independencia*.

A co-operative was created in 1964, with a membership that included about 90 per cent of the fishers, but it foundered eight years later and was formally terminated in 1980, as a result of administrative mismanagement and a political climate unfriendly to co-operatives. As Chile returned to democracy, fishermen organized themselves into 'syndicates', but remained economically dependent

with the aim of increasing and stabilizing prices by entering European markets directly.

Nominally, the fishery has been managed by a centralized administration of regulations that cover legal size, a closed season and the release of egg-carrying females. Yet, as Antonie de Saint-Exupery wrote in The Little Prince, "the essential is invisible to the eye": an effective but unwritten sea-tenure system, established by tradition, has put a cap on the size of the fishing force, and regulated access for decades, even in the absence of a formal limited-entry regime or other access controls.

Each fisherman or fisherman's family member may 'own' a certain



Archipelago of Juan Fernández islands, off central Chile. Lobster stocks are the backbone of the economy of these islands

on middlemen who provide cash advances and an assortment of supplies before the start of the fishing season. In 1999, a group of fishermen started a small private venture with support from a government agency and non-governmental organizations (NGOs), with the purpose of facilitating marketing and circumventing intermediaries. In recent years, the main syndicate started its own marketing of lobsters through exports,

number of fishing spots, known as *marcas*, where lobster traps are deployed, one per spot. Most of those spots have been discovered and claimed over decades, although new ones are still being identified with the help of technological aids like echo sounders. *Marcas* are identified by alignments of land features; each fisherman knows by heart the location of his *marcas*, and of those belonging to others. Use and transfer of rights

over *marcas* are regulated by informal, but well-established, internal rules. *Marcas* are not sold but can be transferred with a boat if the latter is sold; they can be inherited by family members, and are often lent to other users under a variety of arrangements. In the event of a fisherman being unable to harvest in his *marcas*, others are expected to do so, but the *marcas* return to the 'owner' once he goes back to fishing. This complex and highly structured traditional tenure system enjoys high compliance.

As part of a project initiated by the Juan Fernández syndicate, we mapped the location of all *marcas* around the islands with global positioning systems (GPS), and recorded their 'owners'. The total number of *marcas* identified near the Robinson Crusoe and Santa Clara Islands was 3,762.

While the *marcas*' tenure system has been completely ignored by the administration until very recently, scientific input to agency managers has consisted of discontinuous stock assessments projects and equilibrium models leading to total allowable catch (TAC) recommendations. Introduction of a TAC, however, would require the transition from an informal but tightly structured territorial tenure system to some form of quota allocation, likely to be socially disruptive.

Seeing the need for improved advice, the Juan Fernández syndicate acted to develop its own indicators of

....the Juan Fernández syndicate acted to develop its own indicators of stock status and fishery performance.

stock status and fishery performance. Fishermen perceive stock abundance through catch per trap haul or per fishing trip, so some form of catch per unit effort (CPUE) would be a natural indicator, one which fishermen can monitor themselves, and understand. Monitoring and analysis require a format for the provision of scientific or technical advice that operates

from the bottom up. A collaborative effort between the syndicate and independent scientists, taking advantage of technical skills available within the fishing community and with the support of conservationoriented NGOs, led to the design and implementation of a cost-effective logbook sampling programme. The indicators monitored, together with the empowerment of the fishermen's organization, gained through implementation of the process, are expected to lead to management strategies based on simple decision

Early in the morning of 27 February 2010, the orderly and almost idyllic life of Robinson Crusoe Island and its fishing community came to an end. A train of three tsunami waves, 12-15 m high, hit Cumberland Bay. The exposed sectors of San Juan Bautista were devastated. Flooding progressed horizontally over approximately 300 m, reaching a maximum height of 20 m. The tsunami led to 16 fatal casualties, nearly 50 families were affected, and serious damage to the infrastructure of the community occurred: the municipal hall, the post office, the coast guard detachment, a gymnasium, the parks service office, the cemetery, churches, sport clubs, the museum and library, the geriatric home and communications equipment were completely destroyed. It was almost miraculous that the tsunami did not hit the temporary fishing village of Selkirk Island, 100 miles westward. The waves passed south of the island. Had the tsunami struck the island, the consequences might have been devastating, as the houses there are built near the beach, at the foot of a deep gorge.

An assessment of damage to the fishing infrastructure and fleet in the aftermath of the disaster revealed that the two fishing coves (in the north and south) had been damaged. Sheds and winches used to beach the boats were totally destroyed. The facilities of the fishers' association, built with great effort and pride, were completely wiped out. Gone were the office building, the showroom for display of marine products, and the 50 lockers where

### The Honour of Marcas

Julio Chamorro, a member of the Juan Fernández syndicate and the son of a local island boatbuilder, responded via email to questions put by Ramya Rajagopalan of ICSF, and translated by Billy Ernst:

### Could you tell us something about the origins of the marcas system?

Marcas were established during the onset of the lobster fishery in Juan Fernández archipelago around 1893. During the early years, the fishery operated in shallow inshore waters using baskets; each boat had its own delimited fishing area. Later on, the fishing expanded progressively to deeper areas, and traps were introduced. The best fishing spots to fish for lobster are rocky outcrops or small shallow reefs. These were located by setting adrift a buoy, line and weight rig; once a reef was hit. fishers recorded the spot using landmarks and leading lines.

### How has the syndicate developed its own indicators for the lobster fishery?

In October 2006, at the beginning of the 2006-2007 lobster season, the Syndicate of Independent Workers Artisanal Fishermen of the Juan Fernández Archipelago (STIPA-JF), in collaboration with the University of Concepción, started to implement a monitoring programme for the fishery. Fishermen themselves systematically collected basic information on catch and effort, which was used to estimate how much effort was exerted, as well as where and when the lobsters were being caught. This continuing exercise allows for a detailed temporal and spatial analysis of catch per unit effort (CPUE).

### How are fishers involved in the monitoring?

Fishermen are committed to collaborate in the collection of basic fisheries data, primarily through logbooks in which are recorded information on the total catch of commercial and non-commercial lobsters in each trap hauled, and the estimated total weight of the bait. The objective is to improve the quality of basic fisheries information, and also to follow up on previous projects like the survey of *marca*s conducted during the 2004-05 and 2005-06 seasons.

## Are these indicators recognized by scientific and formal management institutes?

The indicators have been analyzed at the end of each fishing season by the Department of Oceanography of the University of Concepción. For the last four seasons the programme has produced CPUE estimates by statistical areas. Since the 2006-07 season the results have been recognized by the Undersecretariat of Fisheries and by the National Fisheries Service. We have since worked together with the National Fisheries Service by providing fisheries data. But these data have not yet supported formal management regulations.

### Do marcas have a legal status in Chilean fisheries legislation?

No. The *marca*s system does not have legal status, nor is it formally accepted by the Chilean central fisheries authority. The system is used only in the Juan Fernández lobster fishery, and is broadly respected. Ownership of *marca*s is honoured even after the prolonged absence of a fisherman from the archipelago. To give one example: Hugo Gonzales, a fisherman who moved to the continent and returned 40 years later, fishes today using his old *marcas*.

fishermen kept their gear and supplies. The spacious and neatly kept workshop of the boatbuilder was totally destroyed. Out of the 41 boats that operate in Robinson Crusoe Island, eight were completely lost and 11 damaged; one-

third of the outboard motors were lost. The loss of boats, gear and equipment amounted to around half a million United States (US) dollars.

Fifty minutes before the tsunami hit Robinson Crusoe Island, central

Chile had been shaken by an an 8.8-magnitude earthquake that generated waves that hit approximately 550 km of the continental Chilean coastline with great intensity. Warning systems did not work (see "Seismic Shock" by Brian O'Riordan in SAMUDRA Report No. 55, March 2010). When the tsunami hit the island, before 5 a.m., most of the islanders were still sleeping. Unusual bobbing of the boats in the bay-the first sign of the impending disaster-went ignored. Then Martina Maturana, the 12year old daughter of a police officer, heard about the earthquake from her grandfather on the mainland. She ran down to the town plaza and rang the emergency bell, providing warning to some of the island's residents.

The tsunami's death toll in continental Chile was proportionally much smaller than in Juan Fernández, apparently because of the long experience of artisanal fishers with earthquakes and their consequences. Tsunamis had hit the Juan Fernández islands earlier—on 25 May 1751, when 35 persons (including the Spanish governor) died, and on 20 February 1835. Yet, the frequency of tsunamis has been too low to produce a preparedness for natural hazards among the islanders.

The fishery started to recover remarkably soon after the tsunami hit Robinson Crusoe Island. The syndicates began discussions with the central fisheries administration, and resumption of fishing operations, announced by the governor on 13 March (just two weeks after the tsunami), became effective by the end of that month. Fishermen shared boats and motors to compensate for lost equipment, and fishers with operating boats checked the traps left unattended by relatives who had lost their gear. The Selkirk Island teams returned to Robinson Crusoe Island to help in the recovery. Initiation of the 2010-2011 season fishing was advanced by one month to compensate for the fishing days lost after the tsunami, specially in Selkirk Island. The traditional tenure system survived intact, and was clearly a determinant factor in the orderly resumption of fishing operations.

Solidarity from external sources was remarkable. The Food and Agriculture Organization of the United Nations (FAO) contributed with the acquisition of eight new boats. Four of them were built with laminated wood, in the traditional design of the archipelago, thus merging technological innovation with cultural identity. The North Pacific fishing industry raised US\$85,000, which were used to replace lost fishing gear and supplies such as outboard motors, winches, batteries, buoys, lines, radios and raincoats. The Robinson Crusoe Lobster Fishery Relief Fund, started by a conservation biologist, brought in money to reconstruct the two winch houses needed to harbour the powerful winches donated by the Alaska crabbers. There is an initiative to rebuild the headquarters of the main syndicate with financial assistance from the Slow Food Foundation. The Japanese company Honda donated 15 outboard motors, while the Japan International Co-operation Agency (JICA) has offered US\$100,000 to rebuild 50 gear lockers.

The resilience of the fishery to the unpredictable natural disaster was a result of several factors: most of the members of the tightly knit local community belong to fishermen families; fishers are well organized; and the unwritten rules of the traditional tenure system helped the orderly return to fishing activity.

The case of Juan Fernández offers some important lessons. While a centralized warning system proved dysfunctional, the community was effective in emergency response: assessment of impact and immediate needs, reconstruction, and sustainable recovery.

### For more

K

en.wikipedia.org/wiki/Juan\_Fernández\_ Islands

Juan Fernández Islands

www.oikonos.org/fishing.htm

Juan Fernández Islands Conservancy

www.slowfood.com/slowfish/pagine/eng/pagina.lasso?-id\_pg=117

Slow Food

# **New Goals from Nagoya**

The Tenth Meeting of the Conference of Parties (COP10) of the Convention on Biological Diversity (CBD) at Nagoya, Japan, made some progress

pproximately 18,650 people, representing State **Parties** governments, United Nations (UN) agencies, representatives of intergovernmental, non-governmental, indigenous peoples and local community organizations, and representatives from academia and industry, participated at the Tenth Meeting of the Conference of Parties (COPIO) of the Convention on Biological Diversity (CBD), held in Nagoya, Japan, during 18-29 October 2010.

The CBD, which came into force in 1993, has three main objectives: to promote the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the use of genetic resources. Currently, 193 States are party to the CBD, making it among one of the most widely ratified Conventions.

COPIO will perhaps be best remembered for the adoption of the 'historic' Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. The instrument outlines legally binding international rules for benefits from genetic resources used in food, pharmaceuticals, cosmetics and other products, with countries as well as with local communities and indigenous groups, when such resources are derived from their land or are under their management. adoption of this protocol addresses a long-held concern developing countries about biopiracy, though several developing countries, such as Bolivia, Cuba and Ecuador, put on record their disappointment that the adopted Protocol did not meet their expectations.

extensive negotiations, After COPIo also adopted a revised 10-year Strategic Plan for the period 2011-2020, designed to halt the loss of the world's biological diversity. Parties agreed to take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being and poverty eradication. The Strategic Plan includes 20 targets for 2020, organized under

COP10 will perhaps be best remembered for the adoption of the 'historic' Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization.

five strategic goals. Parties have been invited to set their own targets within this flexible framework, taking into account national needs and priorities (see Box I for some targets of direct relevance to small-scale and artisanal fishing communities).

### **Higher targets**

Several States and environmental groups were keen to see higher targets for protected areas, particularly in a marine context, including in marine areas beyond national jurisdiction (ABNJ). However, due to reservations expressed by certain countries, particularly developing countries, the target for marine and coastal protected areas was retained at 10 per cent. Currently, only a little over one per

This report has been written by Ramya Rajagopalan and Chandrika Sharma (icsf@icsf.net) of ICSF



Approximately 18,650 people participated at the Tenth Conference of Parties (COP10) of the Convention of Biological Diversity (CBD), which adoped the 'historic' Nagoya Protocol

cent of the world's marine and coastal areas are under such protected areas. Developing countries were insistent in pointing to the need for adequate and timely financing, including through the Global Environment Facility (GEF)—the financial mechanism linked to the CBD—to enable them to meet the targets set.

Countries also agreed on a Strategy for Resource Mobilization aimed at raising current levels of development assistance towards implementing the objectives of the Convention.

Countries also agreed on a Strategy for Resource Mobilization aimed at raising current levels of development assistance.

Interestingly, a draft decision on "Policy Options Concerning Innovative Financial Mechanisms" outlining a range of market-based mechanisms promoted by developed countries, was not adopted after several developing countries expressed serious reservations. Bolivia, in particular, on behalf of the member countries of the Bolivarian Alternative for the Americas (ALBA), expressed strong objections. Bolivia pointed to the need

for safeguards to prevent financial speculation, the commodification of nature, and the violation of the rights of indigenous peoples and local communities.

Other items on the agenda of COPTO included in-depth consideration on the review and implementation of the Programme of Work (PoW) on marine and coastal biological diversity (agenda item 5.2), protected areas (agenda item 5.4), Article 8(j) and related provisions (agenda item 6.7), sustainable use of biodiversity (agenda item 5.5) and inland water biodiversity (agenda item 5.1).

Parties undertook an in-depth review of the progress made in the implementation of the elaborated PoW on marine and coastal biological diversity (as contained in annex I to decision VII/5).

The draft decision from the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA14) specifically addressed five issues: identification of ecologically or biologically significant areas (EBSAs), and scientific and technical aspects relevant to environmental impact assessment in marine areas; impacts of unsustainable fishing such as destructive fishing practices, overfishing, and illegal, unreported and unregulated (IUU) fishing on marine and coastal biodiversity; impact of ocean fertilization on marine and coastal biodiversity; impact of ocean acidification on marine and coastal biodiversity; and impacts of human activities on marine and coastal biodiversity.

### **Global inventory**

Several Parties intervened during the debate in the Working Group. Mexico and Brazil stressed the central role of the UN General Assembly (UNGA) in ABNJ and in the identification and designation of EBSAs, and opposed the creation of a CBD global inventory of EBSAs in ABNJ. Norway highlighted the need to clarify that the identification of EBSAs is only a scientific and technical step, and that it has no function on the policy and management responsibility. Both Norway and Brazil proposed

# Strategic Plan for Biodiversity, 2011-2020: Selected Targets

**Target 6:** By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

*Target 8:* By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

**Target 9:** By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

**Target 10:** By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

*Target11:* By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes.

*Target 18:* By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

deleting reference to a process towards designation of MPAs in ABNJ.

The International Indigenous Forum on Biodiversity (IIFB) urged Parties to recognize traditional knowledge related to marine and coastal areas as equal to Western scientificknowledge; guarantee full and effective participation of indigenous peoples in marine and coastal policy design, development, implementation and monitoring at all levels; and maintain the rights of indigenous peoples to traditional lifestyle and sustainable management of marine and coastal resources in accordance with their traditional knowledge. Drawing attention to the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), Articles 8(j) and 10(c) of CBD and other international instruments, IIFB further urged Parties to recognize traditional water management systems indigenous peoples and to make every effort to implement comprehensive measures, including studies, on the impacts of climate change and ocean acidification on bioresources and their livelihoods. The IIFB also put on record its opposition to ocean fertilization, and called for clearly defining 'open oceans and deep seas', as indigenous peoples have a different understanding of the terminology.

#### **Target-driven efforts**

The World Forum of Fisher Peoples (WFFP) and the International Collective in Support of Fishworkers (ICSF) expressed concern about current, target-driven efforts to establish marine and coastal protected areas and associated human rights violations. They called on Parties to bindingly involve, recognize and build on existing local and traditional knowledge and governance systems and respect principles of sustainable use consistent with Programme Element 2 of the Programme of Work on Protected Areas (PoWPA) and the UNDRIP. They also called for regular reporting on the progress in implementing Programme Element 2 on governance, participation, equity and benefitsharing. The Statement further urged Parties to discourage intensive forms of aquaculture and the introduction of genetically modified and exotic species in aquaculture. Several of these issues were further elaborated during the ICSF-WFFP side event on 21 October 2010 (see Box 2).

The Food and Agriculture Organization of the United Nations (FAO), pointing out that marine

The Statement further urged Parties to discourage intensive forms of aquaculture and the introduction of genetically modified and exotic species in aquaculture.

protected areas (MPAs) are one among several available tools in the fisheries management tool box, called for MPAs to be established within the framework of a broader ecosystem approach. The United Nations University (UNU) pointed to the social and environmental benefits linked to community-based initiatives, such as the locally managed marine areas in the Pacific and Satoumi in Japan.

The Chair of the Working Group announced that further discussions on bracketed text in the draft decision would take place in a Contact Group under the Chairmanship of Renee Sauve of Canada, to further discuss on the proposed establishment of a CBD global inventory of EBSAs, designation of MPAs in areas beyond national jurisdiction and an expert workshop on marine biodiversity and climate change. The discussions in the Contact Group and in the subsequently established Friends of the Chair group were contentious, long and protracted, taking place over several sessions, some of which went late into the night.

A key issue under discussion was the mandate of the CBD in ABNJ. The text finally adopted reflects the consensus reached. It reiterates the "central role of UNGA in addressing issues relating to the conservation and sustainable use

of biodiversity in marine areas beyond national jurisdiction". It recognizes the key role of the CBD in the "provision of scientific and, as appropriate, technical information and advice relating to marine biological diversity, the application of the ecosystem approach and the precautionary approach". Noting the slow progress in establishing MPAs in ABNJ, and the absence of a global process for designation of such areas, it invites the UNGA to request the Secretary-General to convene, during 2011, a meeting of the Ad Hoc Open-ended Informal Working Group to expedite its work on approaches to promote international co-operation and co-ordination for the conservation and sustainable use of marine biological diversity in ABNJ, and consideration of issues of MPAs, and urges Parties to take action to advance the work of the Working Group.

On the issue of EBSAs, the decision recognizes that the scientific criteria for the identification of EBSAs presents a tool which Parties and competent intergovernmental organizations may choose to use to progress towards the implementation of ecosystem approaches in relation to areas both within and beyond national jurisdiction, emphasizing that the application of the EBSA criteria is mainly a scientific and technical exercise. It requests the CBD to collaborate with other organizations to establish a repository for scientific and technical information and experience related to the application of the scientific criteria on the identification of EBSAs, as well as other relevant compatible and complementary nationally and intergovernmentally agreed scientific criteria that shares information and harmonizes with similar initiatives, and to develop an information-sharing mechanism with similar initiatives, such as FAO's work on vulnerable marine ecosystems (VMEs).

#### **Climate change**

Regarding climate change, delegates agreed to request the Secretariat to include the interaction between oceans and climate change, and alternatives for mitigation and adaptation strategies, in

the proposal to develop joint activities among the Rio Conventions, and hold an expert workshop on marine biodiversity and climate change, inviting collaboration with the United Nations Framework Convention on Climate Change (UNFCCC).

Another issue highlighted was the need to ensure balance between the different elements of the PoW on marine and coastal biodiversity. Brazil pointed to the need for greater focus on the other elements of the PoW (invasive alien species, integrated coastal mangement, MPAs within national jurisdiction, and aquaculture), balancing the emphasis in the current draft decision on ABNJ. The text adopted thus notes the need for "a balanced approach to all elements of the PoW on marine and coastal biodiversity, as contained in annex I to decision VII/5". The need to improve MPA implementation in areas within national jurisdiction and to address issues of climate change and coral bleaching was stressed by Indonesia. Indonesia also called for guidance in the use of marine spatial planning, in particular on ecological, economic, social, cultural and other principles used to guide such planning.

Socioeconomic issues of relevance to indigenous and local communities were conspicuous by their near absence in the draft decision on marine and coastal biodiversity that came from SBSTTA14. Itwas, therefore, positive that the proposal by non-Parties to include two paragraphs, on participation and traditional knowledge, was accepted, with modifications. Their insertion was proposed and supported by Fiji, Granada, Brazil and Palau. The European Union (EU) asked to remove the reference to UNDRIP, while South Africa and Canada asked to insert "where appropriate", in the context of poverty alleviation. Brazil proposed, and Canada supported, the reference to traditional knowledge. The adopted paragraphs are:

13 (b): Further efforts on promoting full and effective participation of indigenous and local communities, in line with Programme Element 2 of the Programme of Work on Protected Areas (decision VII/28), ensuring that



The ICSF side event on incorporating social aspects into MPA planning and implementation drew attention to the resource management initiatives of fishing communities

the establishment and management of marine and coastal protected areas aims to make a direct contribution, where appropriate, to poverty alleviation (decision VII/5, annex I, paragraph 8);

34. Recalling decision IX/20, identification of ecologically or biologically significant areas (EBSAs) should use the best available scientific and technical information and, as appropriate, integrate the traditional scientific, technical, and technological knowledge of indigenous and local communities, consistent with Article 8(j) of the Convention.

Socioeconomic issues of relevance to indigenous and local communities were conspicuous by their near absence in the draft decision on marine and coastal biodiversity that came from SBSTTA14.

There was also consensus on the need to ensure that no ocean fertilization takes place, consistent with the earlier COP9 decision.

The decision on PoWPA had specific components on MPAs, and Programme Element 2 on governance, participation, equity and benefit-sharing. Brazil, in its intervention in the Working Group, called for inclusion of new text encouraging Parties to establish MPAs as fisheries management tools. Palau

#### **ICSF-WFFP Side Event**

### **Getting it Right: Incorporating Social Aspects into MPA Planning and Implementation**

The side event on MPA planning and implementation, jointly organized by ICSF and WFFP on 21 October, was chaired by Naseegh Jaffer, Chairperson of WFFP. Chandrika Sharma, Executive Secretary, ICSF, drew attention to resource management initiatives of fishing communities, including the struggles and campaigns they have undertaken to effectively check the destruction of coastal and marine habitats and resources.

Jorge Varela shared experiences from Honduras, stressing that despite local communities successfully mobilizing to designate the Gulf of Fonseca as a Ramsar site in 1999, wetlands are increasing degraded by industrial expansion of shrimp farms, which undermines local livelihoods and accelerates biodiversity loss and poverty.

Antonio Garcia Allut of the Fundaçion Lonxanet para la Pesca Sostenible, Spain, described the initiative taken by the Cofradia of Os Miñarzos to set up an MPA, an initiative that has already yielded positive social and biological outcomes.

Ravadee Prasertcharoensuk of the Sustainable Development Foundation, Thailand, pointed to overlapping legal and institutional frameworks, and the need for better harmonization. She stressed the importance of recognizing the rights of fishing communities to manage resources.

Jorge Luis Andreve Díaz of the Kuna tribe of Panama, shared the indigenous worldviews of natural systems as interconnected, collective and dynamic. He stressed that MPAs must integrally involve local communities, ensure their free, prior and informed consent, and appropriately take into account equity and linkages between biodiversity and culture.

Antonio Carlos Diegues, an anthropologist from Brazil, drew attention to locally declared marine extractive reserves along the coast of Brazil, which are based on the notion of sustainable use.

In the discussion that ensued, the following issues were flagged: the need for governments to report on their obligations under PoWPA, particularly Element 2; the need to ensure participation of local fishing communities in CBD processes, perhaps through a voluntary fund; the need to prepare best-practice guidelines on MPAs in time for the World Parks Congress in 2014; and the need to ensure that large conservation NGOs change their policies and approaches to involve local communities in decision-making processes.

highlighted the need to recognize commitment and sacrifices made by local communities within protected areas for the benefits of humankind and the planet. Canada, supported by EU, called for effective partnership with indigenous peoples and local communities in establishment of protected the areas, and stressed the need to manage marine reserves co-operation with local communities. Indonesia drew attention to its recognition of community conservation areas and customary areas where sustainable use of resources is allowed. Japan highlighted that any enlargement of protected areas should

be considered only after consultation with local communities. Madagascar called for strengthening the capacity of local communities to manage protected areas.

#### **Market-based schemes**

The IIFB expressed grave concern about the invasion of "market-based mitigation schemes" from UNFCCC to the CBD, highlighting the danger that protected areas established in the name of climate change mitigation will completely ignore the fundamental rights of indigenous and local communities. It called for better implementation of Programme Element 2 of PoWPA, pointing out that it remains

### **Protected Areas and Indigenous Communities**

Excerpts from the final decision on protected areas:

30. Invites Parties to:

- (a) Establish clear mechanisms and processes for equitable cost and benefit-sharing and for full and effective participation of indigenous and local communities, related to protected areas, in accordance with national laws and applicable international obligations;
- (b) Recognize the role of indigenous and local community conserved areas and conserved areas of other stakeholders in biodiversity conservation, collaborative management and diversification of governance types;
- (c) Recalling paragraph 6 of decision IX/18 A, further Invites Parties to:
  - (i) Improve and, where necessary, diversify and strengthen protected-area governance types, leading to or in accordance with appropriate national legislation including recognizing and taking into account, where appropriate, indigenous, local and other community-based organizations;
  - (ii) Recognize the contribution of, where appropriate, co-managed protected areas, private protected areas and indigenous and local community conserved areas within the national protected area system through acknowledgement in national legislation or other effective means;
  - (iii) Establish effective processes for the full and effective participation of indigenous and local communities, in full respect of their rights and recognition of their responsibilities, in the governance of protected areas, consistent with national law and applicable international obligations;
  - (iv) Further develop and implement measures for the equitable sharing of both costs and benefits arising from the establishment and management of protected areas and make protected areas an important component of local and global sustainable development consistent with national legislations and applicable international obligations;
- (d) Include indigenous and local communities in multi-stakeholder advisory committees, in consultations for national reporting on the programme of work on protected areas, and in national reviews of the effectiveness of protected-area system;
- (e) Conduct, where appropriate, assessment of governance of protected areas using toolkits prepared by the Secretariat and other organizations, and conduct capacity-building activities for protected area institutions and relevant stakeholders, with support from international organizations, non-governmental organizations and donor organizations, on the implementation of element 2, and especially on governance aspects of protected areas, including issues such as environmental conflicts;

the least implemented aspect of the PoW

The IIFB further urged Parties to address the issue of restitution of lands and territories that were taken for protected areas without their free prior informed consent (FPIC).

Finally, the IIFB, pointing out that the recommended reporting framework for PoWPA does not sufficiently encourage governments to report on key issues related to indigenous peoples and protected areas (in the sections on equity and participation), made several proposals to improve the reporting format

The final decision on protected areas reflects several of the priorities of indigenous and local communities (see Box 3).

#### Sustainable use

Another notable event at COPIO was the launch of the International Partnership for the Satoyama Initiative (see Box 4). The decision on "sustainable use of biodiversity" adopted recognized this initiative as "a potentially useful tool to better understand and support human-influenced natural environments for the benefit of biodiversity and human well-being".

### The Satoyama Initiative

http://satoyama-initiative.org/en

The International Partnership for the Satoyama Initiative was officially launched at COP10 in October 2010. The Satoyama Initiative, jointly initiated by Japan's Ministry of the Environment and the United Nations University Institute of Advanced Studies (UNU-IAS), is expected to contribute significantly to achieving the three objectives of the Convention. The vision of the Satoyama Initiative is to realize societies in harmony with nature, comprising human communities where the maintenance and development of socioeconomic activities (including agriculture and forestry) align with natural processes. By managing and using biological resources sustainably and thus properly maintaining biodiversity, humans will enjoy a stable supply of various natural benefits well into the future.

The Satoyama Initiative has a three-fold approach aiming to: consolidate wisdom on securing diverse ecosystem services and values; integrate traditional ecological knowledge and modern science to promote innovations; and explore new forms of comanagement systems or evolving frameworks of 'commons' while respecting traditional communal land tenure. It is recognized that protecting biodiversity entails not only preserving pristine environments, such as wilderness, but also conserving humaninfluenced natural environments, such as farmlands and secondary forests and coral reefs, that people have developed and maintained sustainably over a long time.

At COPIO, the CBD, for the first time, also adopted a decision of specific relevance to local communities, recognizing their importance in the implementation of the Convention. The decision on the multi-year PoW on the implementation of Article 8(j) and related provisions of the CBD notes that the involvement of local communities in the work of the Convention has been limited for various reasons. It proposes the convening of an ad hoc expert group of local community representatives, bearing in mind geographic and gender balance, with a view to identify common characteristics of local communities and to gather advice on how communities can effectively more participate in CBD processes, including at the national level, as well as how to develop targeted outreach, and to assist in the implementation of the Convention and achievement of its goals. 8

#### For more

www.cbd.int/nagoya/outcomes/

#### **COP 10 Outcomes**

mpa.icsf.net/icsf2006/jspFiles/mpa/cbdCop10.jsp

#### ICSF@CBD COP10

iifb.indigenousportal.com/

International Indigenous Forum on Biodiversity (IIFB)

www.iisd.ca/

**Earth Negotiations Bulletin** 

www.twnside.org.sg/

Third World Network

# **Beyond Bangkok**

A recent civil society workshop in Costa Rica brought to the fore issues confronting small-scale fishers in Latin America

he Global Conference on Smallscale Fisheries (4SSF), organized by the Food and Agriculture Organization of the United Nations (FAO) in Bangkok, Thailand, in October 2008 launched what has become known in civil society circles as the 'Bangkok process'. Prior to this, a preparatory workshop organized by the International Collective in Support of Fishworkers (ICSF) in Siem Reap, Cambodia, in May 2007, highlighted that "responsible fisheries can be assured only if human rights of fishing communities, including the right to decent work and labour standards and human development, are secure" "Asserting Rights, Defining Responsibilities", SAMUDRA Report No. 47, July 2007). That assertion placed the human rights of fishing communities centre stage in the debate on rights-based approaches to fisheries and the responsible and sustainable development of fisheries and fishing communities. The Bangkok process is all about placing human rights centre stage in the campaign to secure sustainable and responsible small-scale fisheries.

Subsequently, when the 28th session of FAO's Committee on Fisheries (COFI) discussed outcome of the 4SSF conference, several FAO Members expressed the need for an international instrument on small-scale fisheries that would guide national and international efforts to secure sustainable smallscale fisheries and create a framework for monitoring and reporting. They also supported the need for FAO to establish a specific global programme dedicated to small-scale fisheries.

In response, the FAO Secretariat convened three regional workshops for Africa (in Maputo, Mozambique), Asia-Pacific (in Bangkok, Thailand) and Latin America and the Caribbean (in San José, Costa Rica) in October 2010, with the objectives, inter alia, of receiving guidance from national and regional stakeholders on the scope and contents of a possible international instrument sustainable small-scale fisheries development, as well as on priorities implementation modalities

The Bangkok process is all about placing human rights centre stage in the campaign to secure sustainable and responsible small-scale fisheries.

of a global assistance programme. Recommendations from these regional consultations will be presented to 29<sup>th</sup> session of COFI in Rome in early 2011.

Thanks to assistance from FAO, channeled through the International Planning Committee for Food Sovereignty (IPC), 20 representatives of organizations of artisanal fishers and their supporters, as well as men and women workers from the artisanal fisheries sector from Mexico, Honduras, Costa Rica, Guatemala, Nicaragua, Panama, Brazil, Peru and Chile were able to meet prior to the regional workshop for Latin America and the Caribbean.

#### **Preparatory meeting**

The preparatory meeting, facilitated by CoopeSoliDar R.L., with the support

This report is based on inputs from Vivienne Solís Rivera (vsolis@coopesolidar.org),
Patricia Madrigal Cordero, Marvin
Fonseca and Annete Fishchel of
CoopeSoliDar R.L., and from notes provided
by ICSF Members Naína Pierri, René
Schärer and Juan Carlos Sueiro

#### **CIVIL SOCIETY DECLARATION**

Regional Latin American 4SSF Preparatory Meeting:
Securing Sustainable Small-scale Fisheries:
Bringing Together Responsible Fisheries and Social Development.
19 October 2010
Táracoles, Costa Rica

#### Preamble

We, artisanal fishers, indigenous people, people of African descent, fishery workers, men and women from Latin America, both as individuals and representing regional and international organizations working with artisanal fishers, met in the community of Tárcoles.

We re-state that coastal-marine communities and artisanal fishermen and fisherwomen, as well as fishers from inland waters not only contribute significantly to the global production of food, but constitute communities with claims to a particular territory and cultural identity that must be recognized and strengthened.

We affirm that the human rights of fishing communities are indivisible and for responsible and sustainable fisheries to be achieved, it is crucial for the political, civil, social and cultural rights of fishing communities to be guaranteed.

We call on States to recognize these principles so that the full and effective participation of fishing communities can be assured in sustainable fishing, and we demand that our access rights to our territories, to land and water are respected.

We recognize and denounce the fact that proposals previously put forward by civil society have not been heeded by our governments when formulating their policies, strategies and actions.

We are here to apply our ideas to this process, through the strategic axes defined for the Latin American workshop organized by the FAO entitled "Securing Sustainable Smallscale Fisheries: Bringing Together Responsible Fisheries and Social Development".

#### **SUSTAINABILITY**

To achieve sustainable production for optimal societal benefits through an ecosystem approach, it requires that

- industrial fishing is eradicated in the coastal zone within five nautical miles, measured from the low-tide mark, while the fishing grounds and natural banks beyond the five-mile zone where artisanal fishing activities take place are respected;
- mangroves, river mouths, estuaries, fishing banks and other important fishery ecosystems are protected;
- fishing gears are regulated and fishing methods that are damaging to the resources and do not protect juvenile fish are eliminated;

contd...

of CoopeTárcoles R.L., was held in the artisanal fishing community of Tárcoles on the central Pacific coast of Costa Rica. Most of the participants had already engaged with the Bangkok process—in Chile at the Punta de Tralca workshop (see "Common Concerns, Lasting Bonds", *SAMUDRA Report* No. 50, August 2008), at the Bangkok 4SSF conference, and at the 28<sup>th</sup> session of COFI meet in March 2009.

The pros and cons of the Bangkok process and associated meetings were discussed at the Costa Rica workshop. Cairo Laguna, representing artisanal fishers from Nicaragua, said that the process had been important since the issue of artisanal fisheries had been brought onto the international agenda. There was now an opportunity "to identify the problems that we face in the region and to feed these back to FAO centrally."

David Chacón, an artisanal fisher from Costa Rica, referred to the September 2008 Tárcoles Declaration, made prior to the 4SSF conference, to highlight the importance of collaboration between Central and South American countries in providing a common front.

#### ...contd

- closed seasons are implemented during periods of reproduction for fishery resources that are overexploited and in danger of extinction; and
- management plans are jointly developed and implemented with artisanal fishers.

#### **VULNERABILITY**

The vulnerability of communities to natural disasters and climate change must be reduced by .

- eliminating corruption at all levels, and the trafficking of influence in public bodies;
- respecting artisanal fishermen's and fisherwomen's rights in all their forms;
- finding solutions to mitigate the effects of climate change on artisanal fishing communities:
- establishing and implementing public policies for the development of artisanal fishing communities; and
- recognizing the importance of women and their work within families and in the fisheries, and guaranteeing them their due rights.

#### POVERTY

For increasing the contribution of small scale fisheries and aquaculture to poverty alleviation and food security, it is essential that the above proposal be complied with, noting that sustainability and eradicating vulnerability are crucial issues for our artisanal fishing communities .

#### We recommend:

- setting up a COFI subcommittee on artisanal fisheries that will include the participation of representatives of artisanal fishing organizations and legitimate parties;
- elaborating, approving and implementing an International Declaration on artisanal fishing that is binding on States;
- developing, approving and implementing, in consultation with artisanal fishers'
  organizations, representatives and legitimate parties, a programme and international
  plan of action in support of artisanal fishing; and
- supporting the creation of a specific chapter on artisanal fishing within the FAO Code of Conduct for Responsible Fisheries.
- We demand that the programme and global plan of action for artisanal fishing:
- sets up a Steering Committee for Global Assistance that includes international and regional organizations from the artisanal fishing sector; and
- takes into account the ethnic, cultural and gender differences, and ensures that
  these are reflected in the composition of the Steering Committee and in the regional
  offices.

Zoila Bustamente, President of Confederación Nacional de Pescadores Artesanales de Chile (CONAPACH), Chile's National Confederation of Artisanal Fishermen, highlighted the need for space to be given to artisanal fishers in the discussions, and the importance of artisanal fishers as a "driving force for food production".

According to delegates from Central America, despite FAO meetings being open to civil society representatives, fishers were often at a disadvantage because they had no prior access to information. On the other hand, government

representatives were much better informed.

It was also pointed out that often the participation of government representatives is not systematic or regular since meetings are attended by different representatives. This makes it difficult for civil society organizations to ensure that official positions take their views into account.

The Costa Rica workshop also discussed the importance of strengthening organizations at the local level, and ensuring that information is provided to grassroots sectors in an understandable form. The four key themes of the FAO workshop were discussed in groups, following which artisanal fishers and their representatives met independently to agree on the key issues to be included in their declaration.

In conclusion, it was felt that the opportunity to work and reflect in a collective way prior to the FAO workshop strengthened the participation of leaders from Latin America's small-scale fisheries sector. The Costa Rica workshop highlighted the need to use such spaces to prepare and strengthen legitimate strategies and to share progress—or the lack of it—in fulfilling international commitments, both by international organizations and by governments.

The FAO workshop that followed in San José, from 20 to 22 October 2010, was attended by representatives from most of the countries in the region, with the exception of Venezuela, Mexico, Chile and the Dominican Republic. Civil society participants played a very important role in the workshop, and Latin American States were very open to the proposals under consideration, including for an international instrument for small-scale fisheries.

Presentations were made by officials from FAO and from the

Organization of Fisheries and Aquaculture for the Isthmus of Central America (OSPESCA) on the three thematic issues and the key cross-cutting including issues. gender in artisanal fisheries America. But the debate Latin around this latter issue was not sufficiently in-depth, despite importance.

On the theme of "Increasing the Contribution of Small-scale Fisheries and Aquaculture to Poverty Alleviation and Food Security", civil society participants emphasized the need for a human-rights-based approach, the need for exclusive zones, the regulation of destructive gear, inclusive MPAs, fairer market access, and complementary activities like community tourism in Prainha do Canto Verde in Ceará State, Brazil.

It was felt that an ecosystembased approach, though complex and relatively costly, should be used to manage resources in a sustainable manner. In several fisheries, it was pointed out, decisionmaking is based only on the target species and investment in modern vessels and gear. There is a need to widen and document the interrelation between scientific knowledge and local knowledge.

The group discussing climate change and its impact on small-scale fisheries saw greater participation of civil society than of government representatives. There was agreement that public policies are required to deal with the social causes of climate change and the conditions that favour natural disasters and the vulnerability of communities. Funding must be made available and instruments for spatial planning, integrated coastal area management and vulnerability assessment and monitoring must be developed. Also highlighted was the need to take account of social, economic and cultural aspects, and not just environmental ones, in the application of such instruments.

#### **Better understanding**

ICSF Members noted that it would be particularly useful, over the coming months, to better understand



Civil society representatives at Tárcoles workshop highlighted the need to use spaces to prepare and strengthen legitimate strategies

the characteristics, potential and difficulties (for getting approval) of the various options under discussion. They felt that the promotion of an international instrument and a global programme dedicated to small-scale fisheries would be most appropriate, taking into consideration the fact that in 2009 opening up the FAO Code of Conduct for Responsible Fisheries had been rejected. An FAO subcommittee on small-scale fisheries runs the risk of reducing the importance of the sector, they felt.

The field trip to the fishing community of Tárcoles was greatly appreciated by the workshop participants, as it allowed them to get to know the fishers better, and to deepen ties and linkages. The Costa Rica meet resulted in a Civil Society Declaration (see box).



Men and women workers and supporters from the artisanal fisheries sector of Latin America met at Tárcoles, Costa Rica, to reflect on issues in small-scale fisheries

#### For more

k

icsf.net/icsf2006/uploads/publications/ samudra/pdf/english/issue\_47/art01.pdf Asserting Rights Defining

## Asserting Rights, Defining Responsibilities

foodsovereignty-org.web34.winsvr.net/ Home.aspx

#### The International Planning Committee for Food Sovereignty

icsf.net/icsf2006/uploads/publications/ samudra/pdf/english/issue\_50/art08.pdf **Common Concerns, Lasting Bonds** 

# **Securing Small-scale Fisheries**

The following document, adopted at a recent FAO workshop in San José, Costa Rica, proposed strategies for securing sustainable small-scale fisheries

> the FAO workshop on "Securing Sustainable Small-**Bringing** Together Responsible Fisheries and Social Development" (4SSF) in Bangkok, Thailand in October 2008, there was a call, inter alia, for an international instrument on small-scale fisheries, and dedicated global programme small-scale fisheries under the purview of FAO which would be guided by COFI. These calls were reiterated by the 28th Session of the FAO's Committee on Fisheries, held in Rome, Italy in March 2009.

The LAC workshop recommended that a small-scale fisheries international instrument and assistance programme should be informed by human-rights principles.

In this context, the Regional workshop for Latin America and the Caribbean (LAC), held in San José, Costa Rica from 20 to 22 October 2010 recognized that:

- the importance of inland and marine small-scale fisheries as a provider of livelihoods, food, employment and income is not yet sufficiently known and appreciated by policymakers and the public at large;
- small-scale fisheries face serious threats due to growing overexploitation of fishery resources, conflicts from other sectors competing over land and water and other natural resources, and often do not benefit from public amenities and social protection measures;

- the participation by small-scale fishing communities in decisionmaking is progressing in several countries but continues to be hampered in many instances by inadequate organizational development and institutional structures;
- the impacts of climate change, including the growing intensity and frequency of natural disasters, is exacerbating the vulnerability of small-scale fisheries; and
- · there is a need to promote smallscale fisheries and secure their access to the resources necessary for sustainable livelihoods. The workshop also recognized the important work already done at the local, national and regional levels to empower fishing communities and fishworkers' organizations to develop and implement improved policies and practices strengthen the social, economic, cultural and political rights small-scale fishing communities.

The LAC workshop recommended that a small-scale fisheries international instrument and assistance programme should:

- be informed by human-rights principles and existing international and regional instruments relevant to good governance and sustainable development;
- draw upon the available experiences with good governance practices in small-scale fisheries at national, regional and global levels;
- strengthen mechanisms for information sharing and communication including by regional and subregional

These conclusions and recommendations were arrived at by participants of the workshop in San José, Costa Rica, held during 20-22 October 2010 organizations such as OSPESCA, CRFM, CDEMA and OLDEPESCA and by associations and networks of fishworkers organizations, both of men and women, and civil society organizations such as CONFEPESCA and ASCR, ICSF, CONAPACH, CIAPA, FENISCPESC, FENAPESCAH, FACOPADES, FENHPESCH, WFF and WFFP;

- foster co-operation among countries and regional bodies in relation to sustainable small-scale fisheries development;
- encompass a broad characterization of small-scale fisheries and the requirement, if not yet done so, to develop national definitions in consultation with the concerned communities, fishworkers' organizations and the private sector;
- assess how various fishing rights systems in the region are performing and their impacts on the livelihoods of small-scale fishers and communities;
- include the ecosystem approach to fisheries (EAF) as a guiding principle for resource management and development; and
- incorporate disaster risk management (DRM) and climate change adaptation (CCA) as an integral part of any assistance programme, considering that DRM is a process that exists before, during and after a disaster.

Three concurrent working groups discussed these three topics—governance, EAF and DRM/CCA—and arrived at a number of conclusions and recommendations for the rights, principles and thematic areas that the instrument and assistance programme should refer to:

Recognition of the rights of smallscale fishing communities relating, in particular, to the following:

- human rights and rights as workers;
- permanence of their communities in coastal and riverine areas;
- just and equitable access to fishery resources;
- exclusive inshore zones for smallscale fisheries;
- safe working and secure living conditions;



The FAO workshop at San José called for an international instrument and a global programme dedicated to small-scale fisheries

- guaranteed access to information concerning the sustainable and integrated development of their communities;
- social security and protection of persons and goods; and
- capacity and resilience to the impacts of natural disasters and climate change.

Adherence to the following principles and practices:

- transparency, inclusiveness and participation; empowerment; gender equality; holistic, integrated and adaptive management and development approaches; and social responsibility, protection and solidarity;
- free, prior and informed consent by affected small-scale fishing communities before adopting and implementing projects, programmes or legislative and administrative measures which may affect them;
- participatory decisionmaking to take place at the lowest possible decentralized level of government that is as close as possible to the people who are affected by them (the principle of subsidiarity);
- recognition and respect of their cultures, forms of organization, traditions, customary norms

- and practices, and traditional knowledge;
- recognition of customary, traditional or otherwise preferential access to fishery resources, land and territories, by small-scale fishing communities, including indigenous peoples and Afro-descendant people;
- combating poverty and ensuring food security and sustainable resource uses;
- avoidance of adverse development impacts;
- fostering an environment to promote advocacy and conflict resolution mechanisms among stakeholders using common geographic space and/or shared space;
- capacity development in all areas;
- facilitation of access to markets and credit;
- promotion of co-management and community-based management, including for marine reserves and protection areas that are informed by the precautionary approach;
- ensuring that DRM and CCA policies and interventions respond to the specific needs of small-scale fisheries;
- giving special considerations to fishing communities who live in small islands that are vulnerable to disasters and climate change; and
- ensuring policies and political commitment by governments to reduce green house gases according to their common and differentiated responsibilities.

An international instrument would include the following thematic elements.

## I) GOVERNANCE OF SMALL-SCALE FISHERIES

Preface: The instrument should be informed by existing relevant instruments such as the FAO Code of Conduct for Responsible Fisheries and the international voluntary guidelines that are being developed under the auspices of FAO on land tenure and natural resources. There is a continuing need to promote the Code in small-scale fisheries.

The proposed instrument should focus on:

Fisheries management, including aspects relating to access regimes; co-management and communitybased management; management institutions such as management councils; habitat protection; protection of juveniles and spawning stocks; promotion of environmentally friendly fishing gear; MPAs that guarantee the participation of smallscale fisheries; management of shared fishery resources and water bodies, including combating transboundary water pollution; combating of IUU fishing by promoting integrated enforcement between governments, fishing industry and small-scale fisheries.

**Building the resilience and adaptive capacity** of fishing communities (including in relation to DRM and CCA).

**Promotion of trade** of products from small-scale fisheries, ensuring greater benefits to them

**Capacity building** by strengthening and empowering fishers' organizations and associations through free, continuing training

**Conflict resolution** in fishing communities

Generation of complementary and alternative livelihoods for small-scale fishers such as community tourism, agriculture, aquaculture and other small business opportunities

**Promotion of gender equality** in small-scale fisheries

**Social benefits** such as social security, retirement benefits, maternity benefits and unemployment insurance during closed seasons

Integration of science with traditional knowledge, including ecological knowledge

Government responsibility to clean inland waters from pollution, and regulation of the use of pesticides in agriculture to combat water pollution

Combating crimes against fishers, including piracy and theft

Eliminating subsidies for unsustainable fisheries and other unsustainable activities

Promoting and supporting networks of communities and organizations that promote sustainable small-scale fisheries.

## 2) ECOSYSTEM APPROACH TO SMALL-SCALE FISHERIES

#### **Priority Action 1**

Generation of ecological, socioeconomic and institutional baselines within the region, for the development of EAF.

#### **Priority Action 2**

Identify and start dialogue with other sectors that are concomitant users of ecological services and natural resources of ecosystems where small-scale fisheries thrive, for a multi-sector approach to EAF.

#### **Priority Action 3**

Develop a comparative analysis of EAF-based SSF management models both within the region and outside the region, whose success examples can be replicated in other countries.

#### **Priority Action 4**

Incorporate local traditional uses and knowledge into national management policies for SSF.

#### **Priority Action 5**

Incorporate scientifically based policy instruments to eradicate the use of harmful fishing gear and methods that affect fish resources in small-scale fisheries.

#### 3) DRM AND CCA

#### **Priority Action 1**

Ensure that DRM and CCA policies and institutional frameworks are in place for small-scale fisheries.

#### **Priority Action 2**

Identify, assess and monitor disaster and climate change risks affecting small-scale fisheries and enhance early warning systems.

#### **Priority Action 3**

Use knowledge, innovation and education to build a culture of safety and resilience within artisanal fishing communities as well as at local and national levels.

#### **Priority Action 4**

Reduce underlying risk factors related to small-scale fisheries

#### **Priority Action 5**

Strengthen DRM and CCA for effective response within the small-scale fisheries sector

#### 4) GLOBAL PROGRAMME ON SMALL-SCALE FISHERIES

The Global Programme on Smallscale Fisheries that many members COFI recommended FAO develop shold be informed by principles the and elements recommended by this and the other regional workshops. Other assistance programmes in support of small-scale fisheries at national, regional and international levels should equally take account of these conclusions and recommendations. 4

For more

R

4ssf.org

FAO Global Conference on Smallscale Fisheries

www.fao.org/fishery/about/cofi/en Committee on Fisheries (COFI)

## EU rules challenge Vietnam's seafood exporters

**7**ietnam is implementing regulations on illegal, unreported and unregulated (IUU) fishing set by the European Commission (EC), according to the General Department of Seafood (GDS) under the Ministry of Agriculture and Rural Development (MARD), reports the Vietnam News Agency.

Under the regulation, which took effect last January, Vietnamese seafood exported to the European Union (EU) should have certificates verifying the fish have been caught legally, and meet hygiene and safety conditions.

The Ministry of Agriculture and Rural Development, together with the GDS and the Directorate-General for Maritime Affairs and Fisheries

50

of the EC (DG-MARE), have held training courses on IUU fishing for fishermen and seafood firms, the Vietnam Economic Times added.

It cited the GDS as saying that in the first 10 months of implementing the IUU fishing regulations, agencies have granted nearly 17,000 original certificates and 3,599 catch certificates for over 78,000 tonnes of fishing products in coastal provinces. But there are still many difficulties in implementing the IUU fishing regulations, the department

The owners of fishing vessels, for instance, encountered difficulties in maintaining logs and making reports about their operations because of their low literacy

levels. Since exporters buy materials through many middlemen, for each batch of goods exported to the EU, export firms had to prepare many certificates, which was a time-consuming and costly process, said Chu Tien Vinh, deputy head of the GDS. In addition, businesses and certifying agencies were also not clear about the seafood species that these regulations did not cover, he said.

MARD will work with DG-MARE to deal with difficulties that Vietnam is facing in implementing the IUU fishing regulations. The ministry has also asked the Department for Aquatic Resources Exploitation and Protection, the National Agro-Forestry-Fisheries Quality Assurance Department and

the Association of Seafood Exporters and Producers to compile a draft regulation on catch certification, and submit it this month.

The EU is the largest consumer of Vietnamese seafood. By the end of last month, Vietnem reported a fleet of about 130,000 fishing vessels, of which 128,000 specialized in offshore fishing, the department said.

#### BOOKSHELF

#### **Fishing for Truth:** A Sociological Analysis of Northern Cod Stock Assessments from 1977 to 1990

Alan Christopher Finalyson, Institute of Social and Economic Research, Memorial University of Newfoundland, Canada. 1994. ISBN 0-919666-79-5. pp 176

his book tells the complex ■ story of the role of science in the decline of the Northern Cod stocks. At issue are conflicting interpretations of institutional and scientific events, institutional and scientific texts, and scientific data. The central claim of this sociologically informed analysis is that all knowledge, including scientific knowledge, is influenced by social process, and that 'truth' is elusive.

### ORGANIZATIONAL PROFILE

## The Locally-Managed Marine Area (LMMA) Network

www.lmmanetwork.org

The Locally-Managed Marine The Locally-Manager involved group of practitioners involved in various marine conservation projects around the globe who have joined together to increase the success of their efforts. The LMMA Network is a learning network, meaning that participating projects use a common strategy and work together to achieve goals. The Network is interested in learning under what conditions using an LMMA strategy works, doesn't work, and why. Network members share knowledge, skills, resources and information in order to collectively learn how to improve marine management activities and increase conservation impact.

The Network's membership consists largely of conservation projects that are using (or planning on using) an LMMA approach, and includes community members, traditional leaders, conservation staff, academics and researchers, donors, and decisionmakers.

These members span the people and cultures of Southeast Asia, Melanesia, Micronesia, Polynesia and the Americas. Some nations have their own countrywide network, which operates independently from, but within, the framework of the overall Network.

The vision of the LMMA Network is healthy ecosystems and communities, abundant

fish and other marine resource stocks, and sustainable fisheries utilization; protected marine biodiversity; sustainable development in coastal communities; understanding what communities are doing in managing marine areas; understanding ecological and socioeconomic responses to LMMA implementation; and global awareness of the biological and social-economic science related to LMMAs coming out of Asia-Pacific.

The LMMA Network seeks to spread its vision by networking practitioners (both individuals and organizations) and researchers who are committed

to sharing experiences and information on determining the conditions under which locally-managed marine areas can contribute to conservation.

#### VERBATIM

The fishermen's speech seems to abound with instances of figuration, whether the men talk about the sea as mother and as female or refer to its constitution with terms similarly used in speaking about the human body or its physiological/humoral

processes.

—GOTZ HOEPPE IN 'CONVERSATIONS ON THE BEACH: FISHERMEN'S KNOWLEDGE, METAPHOR AND ENVIRONMENTAL CHANGE IN SOUTH INDIA'



## Stock Status and Changes in Tuna Fisheries

n a recent FAO Fisheries Land Aquaculture Technical Paper, world tuna fisheries are reviewed in terms of commercially important species, by ocean and by major fishing gear types. In volume, the most important catches are of skipjack tuna at 50.7 per cent of the global total, particularly in the Pacific Ocean, followed by yellowfin tuna at 31.7 per cent and bigeye tuna at 10.8 per cent. Albacore and bluefin tunas—Atlantic bluefin, Pacific bluefin and southern bluefinare caught in much smaller quantities.

The Pacific Ocean yields more than half of the world's tuna production (64 per cent), followed by the Indian (25 per cent) and Atlantic (11 per cent) Oceans. The catch by purse-seiners has increased very rapidly and now forms the majority of the total yield (from o.3 mn tonnes in 1970 to 2.8 mn tonnes in 2006). Longline used to be the dominant gear type but it is now rapidly losing its share (from 0.5 mn tonnes, 34 per cent of the total in 1970, to 0.65 mn tonnes, 15 per cent of the total in 2005), though coastal small-scale longlining is increasing.

Stock status is reviewed according to the most recent, formal assessments by each of the tuna Regional Fisheries Management Organizations (RFMOs). The review is based on two aspects: whether the biomass (or spawning biomass) is above or below the reference point (RP); and whether fishing mortality is

higher or lower than the level equivalent to the sustainable yield, as represented by the RP, which is generally the maximum sustainable yield (MSY). Catches of bigeye and yellowfin have continuously increased in the Indian and Pacific Oceans, whereas in the Atlantic they peaked in the 1990s and thereafter decreased or stabilized. Stock biomass of tropical tunas (bigeye, skipjack

are more heavily exploited. In particular, southern bluefin and Atlantic bluefin are both in an overfished state.

The technological and physical development of fishing gear and its deployment is continuously progressing. The most recent change with the greatest impact on fisheries was the introduction of fish aggregating devices (FADs) by the purse-seine fleet. The

12,000,000 Global Tuna Production from Marine Capture Fisheries (1950-2008)

Total Tuna Production
Atlantic Ocean
Indian Ocean
Pacific Ocean

4,000,0002,000,0002,000,0002,000,0003 J955 J960 J965 J970 J975 J980 J985 J990 J995 2000 2005

and yellowfin) is generally above, but close to, the RP, and the exploitation level is close to the MSY, except for skipjack, which still appears to be underexploited.

Current fishing mortality coefficients for bigeye and yellowfin are generally below the level of the RP, except those for bigeye in the Pacific Ocean and yellowfin in the Indian Ocean, which are above the MSY level. The temperate tunas (albacore, southern bluefin, Pacific bluefin and Atlantic bluefin)

recent increase in purse-seine catches is directly related to the increase of small-sized tropical tunas caught in association with FADs. At present, nets on FAD schools take most of the fish in the habitat developed under the FAD, hence the species and sizes are highly variable, including many nontarget small tunas and other species. Since the stock size of bigeye is small compared to yellowfin and skipjack, the capture of juvenile bigeye underneath FADs has a more substantial impact on the stock. This has significantly altered the yield per recruit (Y/R) of bigeye stocks as well as the allocation of stocks between longline and surface fisheries (particularly purse-seine).

The greater use of atsea transshipment (mostly by distant-water longline fisheries) and increased use of supply vessels (by purse-seines) have increased the fishing capacity of the fleets, even if the numbers and fish-holding capacity of the fleet have been held constant.

The development of coastal fisheries, including coastal longline fisheries, is also an important feature of the last two decades. This is primarily related to the establishment of exclusive economic zones (EEZs), but is also very closely linked to cost effectiveness and management schemes aimed at distant-water fleets. The establishment of tuna farms has also had a major impact on fisheries, particularly through changes in market price and trade and market structure. As a result of farming, fishing pressure has increased for both large and small fish.

(Source: Miyake, M.; Guillotreau, P.; Sun, C-H; Ishimura, G. "Recent Developments in the Tuna Industry: Stocks, Fisheries, Management, Processing, Trade and Markets." FAO Fisheries and Aquaculture Technical Paper. No. 543. Rome: FAO. 2010. 125p)

#### **PUBLICATIONS**

# Mainstreaming the Economics of Nature: A Synthesis of the Approach, Conclusions and Recommendations of the Economics of Ecosystems and Biodiversity (TEEB)

The Economics of Ecosystems and Biodiversity (TEEB) is a major international initiative to draw attention to the global economic benefits of biodiversity, to highlight the growing costs of biodiversity loss and ecosystem degradation, and to draw together expertise from the fields of science,

economics and policy to enable practical actions moving forward.

Applying economic thinking to the use of biodiversity and ecosystem services can help clarify two critical points: why prosperity and poverty reduction depend on maintaining the flow of benefits from ecosystems; and why successful

environmental protection needs to be grounded in sound economics, including explicit recognition, efficient allocation, and fair distribution of the costs and benefits of conservation and sustainable use of natural resources.

-----

The analysis of TEEB builds on extensive work over the last decades. TEEB presents an approach that can help decisionmakers recognize, demonstrate and, where appropriate, capture the values of ecosystems and biodiversity.

http://www.teebweb.org

# Roundup News, EVENTS, BRIEFINGS AND MORE...

#### 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/Films

Salophoum: Learning from Experiences in Villager-led Action Research. WorldFish Centre, Culture and Environment Preservation Association, The Wetlands Alliance

This DVD is a community produced film made on location in two Salophoum villages in Stung Treng, northeast Cambodia. It forms part of an ongoing social research initiative supported by the local NGO CEPA and the WorldFish Centre. The film documents some of the process and experiences of conducting villager-led research, and includes video interviews with Salaphoum researchers, research assistants, NGO staff and local authorities.

Tankwas: The Papyrus Boats of Lake Tana, Ethiopia by Jean-Yves Empereur

Centre d' Etudies Alexandrines, Egypt. 2009. 13 min.

Paryrellas, or papyrus boats, are often represented on the terracottas, paintings and mosaics of ancient Egypt. At Lake Tana, 1,850 m above sea level and some 4,000 km from the mouth of the river Nile, papyrus grows to three or four m in height, tucked in behind lines of reeds. The local population use it to make mats, fencing and also frail craft known here as *tankwas*. This DVD shows how these *tankwas* are made and used in Ethiopia.

#### **Publications**

Traditional marine management areas of the Pacific in the context of national and international law and policy.

Marjo Vierros, Alifereti Tawake, Francis Hickey, Ana Tiraa and Rahera Noa. United Nations University. 2010. 93 pp.

This report explores the role of traditional marine resources management in meeting both the goals of communities and those of national and international conservation strategies. Specifically, it looks at how traditional practices are applied in various Pacific Island countries, how concepts such as the ecosystem approach and adaptive management are incorporated, whether traditional marine managed areas (MMAs) are recognized by national law, and how and whether they are seen to contribute to national and international protected areas and conservation targets.

Blue Carbon: The Role of Healthy Oceans in Binding Carbon. Nellemann, C., Corcoran, E., Duarte, C. M., Valdés, L., De Young, C., Fonseca, L., Grimsditch, G. (Eds). United Nations Environment Programme (UNEP), GRID-Arendal, 2009.

This rapid response report highlights the critical role of the oceans and ocean ecosystems in maintaining our climate and in assisting policymakers to mainstream an oceans agenda into national and international climate change initiatives.

It estimates that carbon emissions—equal to half the annual emissions of the global transport sector—are being captured and stored by marine ecosystems such as mangroves, salt marshes and seagrasses.

www.grida.no/publications/rr/blue-carbon

#### FLASHBACK

### Small scale, large agenda

The 25th Session of the Committee on Fisheries (COFI) of the Food and Agriculture 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

FAO Technical Consultation for Development of International Guidelines on Bycatch Management and Reduction of Discards 6-10 December 2010, Rome, Italy

Indian Ocean Tuna Commission (IOTC) Scientific Committee 13th

6-10 December 2010, Victoria, Seychelles

FAO Committee on Fisheries (COFI)
29th Session

31 January 2011- 4 February 2011, Rome, Italy

#### WEBSITE

Our Fish, Our Future

Conference for African Ministers, Fisheries and Aquaculture (CAMFA)

This civil society web portal covers CAMFA and assembles information about the various activities held by civil society organizations (CSOs) around the conference in Banjul, Gambia, during 15-23 September 2010. The portal also carries the Banjul Civil Society Declaration.

www.camfa-cso.org/

#### NOTICE

Proceedings of the workshop on "Recasting the Net: Defining a Gender Agenda for Sustaining Life and Livelihoods in Fishing Communities"

Thirty-nine participants from 18 countries, including women fishworkers, representatives of fishworker organizations and NGOs, activists and researchers, met at Mahabalipuram, India, during 7-10 July 2010, to discuss the above theme. The proceedings of the Mahabalipuram workshop reflect on what needs to be

done to develop a 'gender agenda' for sustaining life and livelihoods in fisheries. http://www.icsf.net/SU/Pro/EN/III

#### ICSF @CBD COP10

This webpage provides statements made by ICSF and other civil society organizations at the CBD COPTO meeting. It also provides links to ICSF publications brought out for CBD COPTO.

http://mpa.icsf.net/icsf2006/jspFiles/mpa/cbdCop10.jsp

ENVIRONMENTAL JUSTICE FOUNDATION



## Endquote

hen the fish came alive, with his death in him, and rose high out of the water showing all his great length and width and all his power and his beauty. He seemed to hang in the air above the old man in the skiff. Then he fell into the water with a crash that sent spray over the old man and over all of the skiff.

—from The Old Man and the Sea by Ernest Hemingway

