

SAMUDRA

REPORT

THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



Natural Disasters in Chile

Seafood Retail Market in the US

Small Indigenous Freshwater Fish Species

World Fisheries Day

CBD's Programme of Work on Protected Areas

ITQs in Denmark



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*Fish market in Orissa,
India*
Photo: Neena Koshy/ICSF



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A scene from Curanipe, Maule Region, Chile.
This was one of the towns devastated by the
earthquake and subsequent tsunami

Dealing with Disasters

Rehabilitation and reconstruction efforts in the wake of natural disasters like the recent earthquake and tsunami that hit Chile should adopt a participatory framework

An 8.8-magnitude earthquake hit Chile on 27 February 2010, closely followed by a tsunami that devastated the coast, leaving, according to government estimates, about 500 dead, 96 missing, 800,000 injured or displaced, and damages of about US\$30 bn, equal to 17 per cent of Chile's gross domestic product.

The Chilean earthquake and tsunami were the latest in a series of major natural disasters that have rocked the world recently. Between end-September and early October 2009, the Philippines was severely hit by three successive typhoons—Ketsana, Parma and Mirinae—that caused widespread damage and destruction, affecting about 10 mn people and killing nearly a thousand. On 29 September 2009, an underwater 8.0-magnitude earthquake in the Samoan island region generated a tsunami which caused substantial damage and loss of life in Samoa, American Samoa and Tonga. Over 189 people were killed, most of them in Samoa. A day later, a 7.6-magnitude earthquake hit the Indonesian island of Sumatra, killing over a thousand. On 12 January 2010, a 7.0-magnitude earthquake struck Haiti, affecting above three million people, leaving 230,000 people dead, 300,000 injured, and 1,000,000 homeless.

Recent natural disasters have affected millions of people, destroying houses, schools, hospitals, roads and other infrastructure, as well as livelihoods. They have highlighted the continuing vulnerability of human populations to natural disasters. Equally, they have exposed the persisting weaknesses in disaster warning and response systems, and a lack of basic norms and regulations for urban and rural planning, construction and development, and environmental governance.

These disasters should serve as a wakeup call, particularly for governments. There is clearly need for a specific focus on coastal areas and vulnerable coastal populations, in the light of forecasts of sea level rise and extreme weather conditions associated with climate change. Almost a quarter

of the world's population lives within 100 km of the coast, and they are likely to increase in the future.

Experience and common sense highlight the need for disaster preparedness, particularly at the community level, as well as functioning disaster warning, communication and response systems. Good planning and construction norms can save lives and reduce destruction. Some reports from Chile, for example, have noted that adherence to building norms in urban areas helped reduce mortality significantly during the recent earthquake. It is equally necessary to put in place and implement measures to regulate activities that pollute, degrade or otherwise harm the coastal

environment and its capacity to protect coastal communities from future natural disasters.

Experience from other disasters has also shown that reliable baseline data and information systems are invaluable for effective relief and rehabilitation.

As Chile gears up for the rehabilitation phase,

it would do well to learn from the experiences of natural disasters elsewhere. Invariably, the poorest and most disadvantaged—who are also the most invisible in government records and have minimal assets in the first place—are the most vulnerable during and after a disaster. Following the 2004 Indian Ocean tsunami, for instance, there were allegations that disadvantaged populations, such as women fish vendors and processors, and small-scale fishers were among those who were not compensated for their losses.

In this context, there is need to pay heed to the proposal by CONAPACH, the fishworkers' organization from Chile, for the government to take note of the crop losses suffered this season by seaweed collectors and divers, who need help and compensation to face the coming winter. Compensation should not be limited to those whose losses are higher in monetary terms of vessels, motors and gear lost. Damage assessments and compensation should rather err on the side of socioeconomic justice. Also, rehabilitation works best when communities and their organizations are an integral part of the process.



Seismic Shock

The Chilean State's ineffective response to the recent earthquake and tsunami reveals a systemic failure and is a wakeup call for a more effective warning system

4

On 27 February at 3.34 a.m. local time, the central southern region of Chile was shaken by a powerful, magnitude 8.8 earthquake. The epicentre of the earthquake was offshore, at a depth of about 22 miles, some 70 miles from Concepción, Chile's second largest city, with a population of around 670,000. At 3.52 a.m., the first of three tidal waves was produced. Roughly one hour after the third and final wave came in at 6.32 a.m., the Sub-secretary of the Interior rejected the possibility of a tsunami.

It was thanks to long experience with earthquakes that the death toll in Chile was not much higher. In May

to a coastal strip of around 700 km between San Antonio and Valdivia.”

In a preliminary census carried out with information from different radio stations, local papers, Facebook, Twitter and communications from non-governmental organizations (NGOs) and coastal communities, *Ecoceanos News* made a preliminary estimate that “between San Antonio and the mouth of the river Rapel, in the south of Valparaíso Region (Region V), the *caletas* (settlements) have suffered subsidence, and a large number of artisanal fishing vessels have overturned, and landing areas and godowns destroyed. In addition, there is damage to port infrastructure and commercial activity linked to tourism. A similar situation exists from Port Saavedra, Araucanía Region, up to Corral, in the Rivers (Los Ríos) Region.”

Ecoceanos News reported that around 100 artisanal fishing *caletas* have been totally destroyed, while another 70 or so have had serious damage inflicted on their infrastructure, vessels, homes and citizens. Boats and fishing gear, port infrastructure, refrigeration, drinking water systems and power, public buildings, schools, hospitals, and warehouses and roads are unusable. In places that were less affected, security and operating conditions are nonetheless precarious.

Geographical changes

It is estimated that the impacts of the earthquake and tsunami on the economy of Chilean coastal and artisanal fishing communities could last at least two years, as the tidal waves have changed the geography of various coastal areas.

It is estimated that the impacts of the earthquake and tsunami on the economy of Chilean coastal and artisanal fishing communities could last at least two years...

1960, the largest earthquake ever recorded, measuring 9.5 on the Richter scale, hit southern Chile. The effects of this and the resulting tsunami killed 1,655 people and left around 2mn people homeless. A less powerful earthquake in 1985 also caused extensive damage in central Chile.

The earthquake and tsunami mainly affected six of Chile's 15 Regions, from the O'Higgins Region VI to the Araucanía Region XI, where, according to *Ecoceanos News*, “...the destruction of fishing and small-scale subsistence communities, including seaweed and shellfish gatherers, is almost total. In the Valparaíso and Lakes (Los Lagos) Regions, there is serious destruction. This relates

*This article has been compiled by **Brian O’Riordan** (briano@scarlet.be) from various sources*

The National Confederation of Chilean Artisanal Fishermen (CONAPACH) estimates that 123 *caletas* in six Regions were affected, and some 2,700 vessels destroyed, directly affecting the productive activities of 26,000 fishers and their families, and completely destroying the seaweed harvests stored on the beaches.

An article written by several authors from Chile's Tsunami Warning Centre describes the official response to the earthquake as a catalogue of "errors, lack of concern, ineffectiveness and irresponsible behaviour." The article says: "Only six minutes after it was known that the epicentre of the earthquake was some 90 km to the northeast of the city of Concepcion (out in the Pacific Ocean), the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA), the organization in charge of equipment to evaluate whether or not a tidal wave has been produced, did not function, did not provide any advice, and failed to follow established protocol. The other State body, the National Emergency Office (ONEMI), continued to broadcast that there was no tidal wave".

The failure of the navy was despite a warning being given by the United States Pacific Tsunami Warning Centre (PTWC) in Hawaii, which at 3.46 a.m. alerted SHOA that "... an earthquake of this size has the potential to generate a destructive tsunami that could hit the coasts near the epicentre. The authority should take appropriate action in respect of this possibility." However, the sailor on watch spoke no English. Two minutes later, a scientist at the PTWC, Victor Sardiña, warned SHOA in Spanish that they should put out information and warn the rest of the countries in the Pacific. One hour later, the same scientist warned SHOA that "sea level readings indicate that a tidal wave has been produced" and that they should warn countries in the South Pacific.

Carmen Fernández, Director of ONEMI, emphasized that officials in her organization had been clearly informed by SHOA on three occasions that there was no possibility of a tidal wave. "There was such a degree of imprecision

and ambiguity that no one was able to take a decision, and, on the technical side, there was not even any possibility of doing anything because there was no system (of communication) available to alert people in time for them to escape.... In my personal capacity (as a witness), I can say that those listening to the radio here or at home would have heard the SHOA operator state three times that there was no possibility of a tsunami."

The National Confederation of Chilean Artisanal Fishermen (CONAPACH) estimates that 123 *caletas* in six Regions were affected, and some 2,700 vessels destroyed, directly affecting the productive activities of 26,000 fishers and their families...

On 10 March, Carmen Fernández resigned her post, admitting that she was slow to respond to the earthquake. She was the third senior official to step down as a result of the quake. Earlier, the head of SHOA, Marino Rojas Busos, was fired, and the Junior Interior Minister, Patricio Rosende, resigned.

The State Prosecutor, Sebastian Chaguan, responsible for investigating if criminal charges should be brought against the authorities who neglected to provide a tsunami warning, stated that: "this could have saved lives".



Pichilemu beach, O'Higgins Region, Chile. Damaged 7-9-m fiberglass fishing vessels used to catch common hake and crabs

CADUZZI SALAS



A scene of devastation from Boyeruca in the O'Higgins Region, Chile. The earthquake and tsunami mainly affected six of Chile's 15 Regions

has also opened a special bank account to assist those who have been made destitute by the quake and tsunami.

The Ministry of the Economy has promised a fund of 5,500 million pesos (US\$10.3 mn) to invest in rebuilding the artisanal fishing sector, with a 'fast track' to accelerate the process of reviving the sector. Meanwhile, 2.1 million pesos (US\$4,000) has been allocated to assisting artisanal fishing vessel owners replace lost and damaged vessels and gear.

According to the Food and Agriculture Organization of the United Nations (FAO), 1,000 fishing vessels are considered lost, as reported in the Situation Report of the United Nations Office for the Co-ordination of Humanitarian Affairs (OCHA). The FAO has requested for an assistance of US\$1 mn for the fisheries sector from the UN's Central Emergency Response Fund (CERF) to procure fishing equipment to benefit 6,900 fishers.

Zoila Bustamante says, "This help being planned by the government is but charity, and not sufficient. With this money the affected people will never be able to repair or purchase new vessels. One of the main problems facing artisanal fishers across Chile is indebtedness, and they don't have the capacity to secure bank credit. We feel that this gesture by the government is insufficient to repair the great damage done by the tsunami".

"In these sad times for our country and especially for those *caletas* of artisanal fishers, two words are uppermost in our minds: solidarity and union," says the CONAPACH president.

However, he later announced "there is no precedent that allows us to evaluate whether there is a criminal responsibility, and therefore the Prosecutor will not open a criminal investigation for the time being because there are contradictory accounts with respect to whether or not the organs of State are responsible".

Criticism has also been made of the official response to providing relief following the disaster. Instead of tapping into national networks of traders, agricultural producers and distribution centres, the government struck a deal with four large supermarket chains in the VII and VIII Regions, who were paid US\$10 mn to provide food, water and clothing.

Faced with such conditions, CONAPACH established a solidarity network called "*Caleta for Caleta*", which sought to link artisanal fishers and communities in regions unaffected by the earthquake and tsunami with those who were affected, and to channel aid particularly to those *caletas* that were totally flattened in the VII and VIII Regions. Says Zoila Bustamante, the President of CONAPACH, "The main idea is that *caletas* that did not suffer any damage, like those in the north and in the south, can help those who are now suffering. Each *caleta* should sponsor a *caleta* that has suffered damage and provide it material support". CONAPACH

For more

www.conapach.cl

CONAPACH

www.ecoceanos.cl

Ecoceanos

www.greengrants.org/breakingnews.php?news_id=277

Chilean Disaster Recovery Fund

http://www.cinu.org.mx/chile/docs/OCHSiteresituacion_No._5-eqOCHA-20100308%5B1%5D.pdf

OCHA Situation Report

Changing Retail Landscape

The sourcing of sustainable seafood products for the US retail market has implications for seafood suppliers in developing countries

When Wal-Mart announced in 2006 that it planned to purchase all of its wild-caught fresh and frozen fish for the United States market from Marine Stewardship Council (MSC)-certified fisheries by 2011, it was greeted with a mixed reception. There were those who wondered what the motivation of the corporation was in making such a decision, since many believed the typical Wal-Mart customer would not be willing to pay a premium for sustainable seafood. As the world's largest retailer, with worldwide revenue of over US\$404bn in 2009, there was also great uncertainty whether Wal-Mart could fulfill this pledge. In striving to meet the goal, questions were raised on the impact on those fisheries supplying products to Wal-Mart. Furthermore, it was wondered whether this move would be followed by other retailers in the US.

This is just one example of how the landscape of seafood retailing in the US market has changed considerably in the past several years. While not all United States (US) retailers have followed Wal-Mart's lead to the extent of pledging 100 per cent sourcing from MSC-certified fisheries, an increasing proportion of the consumer-facing market (including national chain supermarkets, chain restaurants and food-service companies, as well as independent grocers and restaurants) have developed seafood sourcing policies that incorporate sustainability as a requirement. As a result, this has had a ripple effect on the rest of the supply chain to influence their seafood sourcing policies from domestic and imported sources. This includes

purchasing an increasing amount of their wild and farmed seafood from sources deemed sustainable by either ecolabelling (third-party certification) programmes or other seafood recommendation programmes, such as seafood guides created by aquariums.

This article will briefly describe the sustainable seafood landscape within the US market, the motivations for the sourcing policies of the retail sector, and the implications for seafood suppliers in developing countries.

Two primary ecolabelling programmes currently provide the US retail sector with ecolabelled products, one for capture fisheries and one for aquaculture. The most widely adopted international ecolabelling programme for capture fisheries comes from the MSC, which certifies capture fisheries based on the environmental impacts of the fishery, as well as the management

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of the stock. Products from MSC-certified fisheries are sold throughout the US retail sector, although not all of it is marketed with the MSC logo. MSC-labelled products are sold in many different supermarkets, but brand recognition remains relatively low among consumers. With respect to aquaculture, the Global Aquaculture Alliance (GAA), with its partner organization, the Aquaculture Certification Council (ACC), has standards to certify farmed shrimp,

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PREETHA RAKESH



Red Lobster restaurant, Illinois, US. Darden Restaurants, the parent company of the Red Lobster restaurant chain, has been a strong supporter of the Global Aquaculture Alliance

criteria. Recommendations are often structured using categories such as 'best choice', 'good alternative', and 'fish to avoid', generally in combination with the use of traffic light colour-coding to create green, yellow and red lists. Consumer guides come in the form of wallet cards, Internet guides and telephone guides on recommended fish products. The Seafood Watch programme of the Monterey Bay Aquarium (MBA) in Monterey, California, is the most prolific and perhaps successful of these programmes, which currently advises major food-service distributors, such as the Compass Group and Aramark, on their seafood sourcing decisions. Other aquariums, such as the New England Aquarium in Boston and Shedd Aquarium in Chicago, operate business-to-business programmes that provide advice to seafood companies on appropriate sources of seafood.

The seafood recommendations of programmes such as the MBA will typically recommend products from MSC-certified fisheries, although it recently changed its rating of MSC-certified Alaska pollock from a 'best choice' (or green list) to a 'good alternative' (or yellow list) item due to concerns about bottom trawling. Products such as farmed and wild tropical shrimp, despite certification by programmes such as the GAA, remain on the 'fish to avoid' (or red list). Thus, clients such as the Compass Group state that they have reduced their purchases of farmed shrimp as a result of these recommendations. This recently changed when the Compass Group announced that it would source farmed shrimp from Contessa Premium Foods, with the approval of the MBA.

Certification programme

Whether this will further change once the Aquaculture Stewardship Council (ASC) becomes operational with its certification programme, and subsequent ecolabelling, for farmed shrimp and other species, remains to be seen. The ASC programme will be based on standards developed after extensive dialogues held for

channel catfish and tilapia to best aquaculture practices (BAP) standards, and is launching additional standards for other species. Darden Restaurants, the parent company of the Red Lobster restaurant chain, has been a strong supporter of the GAA. Ecolabelled farmed shrimp from the ACC can be found in several supermarket chains, including Wal-Mart and Target.

Besides ecolabelling programmes—since not all fisheries and aquacultured species are yet certified and there

These programmes have evolved in the past decade to recommend to consumers and businesses which seafood products to buy or not buy, based on a variety of environmental criteria.

are competing points of view on certification—another primary means by which the retail sector may determine sustainability of seafood products is based upon recommendations made by environmental groups, including the Blue Ocean Institute, and aquariums. These programmes have evolved in the past decade to recommend to consumers and businesses which seafood products to buy or not buy, based on a variety of environmental

various species by the World Wildlife Fund which has had significant stakeholder input.

Given that ecolabelling and seafood recommendations both play a large role in sustainable sourcing policies for the US retail sector, one might then ask what motivates the retail sector in pursuing these policies. For example, what motivated Wal-Mart to pledge to source 100 per cent of its fresh and frozen wild fish from MSC-certified fisheries by 2011? Is it because environmental groups have pressured industry to act, or are consumers demanding sustainable seafood? The actual answer is more complex than either of those posited answers. At the moment, it is certainly a form of corporate social responsibility (CSR), more so than shoppers requesting it. Corporations want to protect their brand image and to do the right thing. Working with environmental groups in a positive fashion is one way to avoid possible negative risks to their brand image. But CSR contains real economic factors as well. For example, in a recent survey we conducted of major US retailers, restaurants, food-service operators and distributors, we found several reasons why they are sourcing sustainable seafood. Among them is the need to promote sustainable fisheries to avoid losing sources of supply due to stock depletion, which imposes real costs to their businesses. Traceability via chain-of-custody certification helps ensure that they are not buying illegally harvested fish. In the current economic conditions, most companies state that these policies are costing their firms more, costs they do not expect to recover from the consumer in the short term. However, recognizing that sustainability is not costless, these firms anticipate that these costs may be recovered from consumers some time in the future, particularly as the global economy recovers.

All this raises several potential issues of concern for developing countries that export to the US. The US imports over 80 per cent of its seafood, and a significant proportion of that comes from developing countries. The US imports seafood from many countries, but among the top 10 in

value are China, Thailand, Indonesia, Vietnam, Ecuador and India. China is slightly unique in that a substantial amount of fish is exported to China from developed countries such as the US, Norway and Russia for processing and re-export.

While the trend is toward sustainable seafood sourcing, it is still true that not all of the US market is focusing on sourcing sustainable

While the trend is toward sustainable seafood sourcing, it is still true that not all of the US market is focusing on sourcing sustainable seafood.

seafood. However, if policies of sourcing sustainable seafood become the norm in the US retail market, and the definition of 'sustainable' is set by certification programmes and environmental groups, it becomes quite important whether seafood from developing countries meets the 'sustainable' definition. If it does not, market access may be hindered, resulting in real implications for food security in those nations that depend upon international trade of seafood for income and livelihoods.

Determination of 'sustainable' is done differently, depending on whether one is using the seafood recommendations, such as that provided by the MBA, the MSC, the GAA, ASC, or any one of the many other groups involved in determining sustainable seafood not mentioned here due to space limitations. In the case of seafood recommendations, while relevant documents are posted online, the standards used have not been created in a stakeholder participatory process, the assessment process is not transparent, open and participatory, and of the numerous guides in existence, standards across guides are not necessarily the same.

Assessments


In addition, developing nations are at a disadvantage in at least two respects. First, in many developing-country fisheries, collection and maintenance

of data is a difficult and costly task, making it difficult to prepare assessments either for certification or for recommendations by groups such as the MBA. This makes it less likely that products from developing countries will be on a 'green' or 'yellow' list; or become certified. A second area of concern relates to the so-called 'fish to avoid' or 'red' list. When a product from developing countries does end up on a red list, there is generally little funding available to producers from developing countries to mount a counter publicity campaign if they believe this recommendation was awarded in error.

Ecolabelling programmes address both of these developing-country concerns better than do the approaches of seafood recommendations. For example, the MSC has launched its Guidelines for the Assessment of Small-scale and Data-deficient Fisheries project, in which experts and representatives from developing countries which do not have 'Westernized' or 'institutionalized' scientific data, research and management programmes in their fisheries can meet the sustainability standards without compromising the MSC standards. The number of developing-country fisheries which are certified has increased. Aquaculture certification will make even more progress in this area as much aquaculture production is done in developing countries. Ecolabelling programmes reward producers who fish with sustainable practices or use responsible fish farming practices, as the latter may provide blanket recommendations against entire fisheries according to country of origin, catch area or gear types and farmed species. Ecolabelling allows consumers to easily recognize, for example, farmed shrimp from responsible aquaculture producers, or pole-and-line tuna, in ways that current mandatory labelling regulations and seafood recommendations cannot.

Finally, competition between certification programmes for both capture fisheries and aquaculture may lead to multiple ecolabels on seafood products in the US retail market.

For capture fisheries, the MSC is the largest and most well known, but other programmes are Friend of the Sea and NaturLand. In aquaculture, the GAA and ASC will soon be competing. This raises a number of additional issues. As for international trade, exporters, especially those from developing countries, do not want to be faced with requirements to meet multiple standards required of multiple certification organizations in order to obtain multiple labels. That would impose tremendous costs. In addition, there is valid concern about consumer confusion over a profusion of labels.

As the landscape of the US retail market is changing to promote sustainable seafood, this does not imply only issues of concern for developing countries. It is worth concluding on a positive note. Several companies in the US (and elsewhere in the world) recognize that their key to survival in the seafood business relies on the survival of the resource. As such, private initiatives funded by corporations are investing in the sustainability of supply sources. This has created direct investment in communities, gear technologies, data collection and other initiatives in fisheries in the developing world to promote sustainability. Such initiatives, combined with more traditional initiatives such as aid to improve governance of resources for sustainability, will result in an improved resource base and global markets. While these efforts may only be fledgling at this point, they should certainly be encouraged as a step in the right direction. 

For more



seagrant.gso.uri.edu/sustainable_seafood/index.html

URI Sustainable Seafood Initiative

www.montereybayaquarium.org/cr/seafoodwatch.aspx

Seafood Watch Programme of Monterey Bay Aquarium

www.gaalliance.org

Global Aquaculture Alliance (GAA)

Clear Challenges, Options

Several opportunities and challenges have emerged for the artisanal fisheries sector in Sierra Leone following the adoption of the Local Government Act, 2004

Between 1999 and 2001, Sierra Leone experienced a bitter civil war that culminated in a collapsed State. The domestic effects of the collapse were severe, with the total disintegration of public authority leading to increased mortality rates, massive flows of refugees and internally displaced people, capital flight, the loss of social capital, and repressed economic growth. Moreover, as research suggests, a country reaching the end of a civil war typically faces around a 44 per cent risk of returning to conflict within five years; there is thus an urgent need to both guarantee the physical protection of Sierra Leoneans and to create the conditions for an improvement in living standards so as to prevent the re-emergence of conflict.

As one factor deemed to have precipitated the conflict was the overcentralization of the State machinery following the dissolution of local councils in 1972, administrative decentralization was seen as a pre-requisite for enhancing personal security and social welfare. The institutional basis for this strategy was the Local Government Act, 2004 (LGA2004), which specifies a list of functions/activities which were to be devolved by line ministries and agencies to local councils by 2008. Among those affected was the Ministry of Fisheries and Marine Resources (MFMR), which was mandated to transfer the management of artisanal fisheries to local government (in the form of the elected councils) under Section 56, subsection b ["Local councils shall issue a licence to anyone in a locality who owns a canoe"] and Section 57,

subsection c ["Local councils shall charge fees for the extraction of fish and establishment of inland fish ponds"] of the LGA2004.

In natural-resource terms, this shift in managerial responsibility could have potentially profound implications as artisanal fisheries account for over 80 per cent of the national catch, with the sector supplying 67.9 per cent of primary commodity exports, accounting for 63 per cent of the country's average daily animal protein consumption, and contributing to about 10 per cent of gross domestic product. Yet, while the decentralization of fisheries resource

Scholars have argued that devolution of functions is necessary for effective participation and accountability of the communities and user groups in resource management.

governance will have a critical role to play in enhancing participation and incorporating local knowledge on the characteristics of the fisheries resource, local capacity to assume these responsibilities is at present severely limited.

Accountability

Scholars have argued that devolution of functions is necessary for effective participation and accountability of the communities and user groups in resource management. In natural resource management, local institutions are better positioned than centralized ones to undertake particular functions such as conflict resolution and service provision.

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However, decentralization is not straightforward, and research has shown that the potential benefits of embracing local participation in resource governance can be undermined by a lack of transparency in implementing the reform; an inflexibility in incorporating local knowledge; the unwillingness of

initial concerns expressed by the MFMR over the limited participation of local communities, the lack of institutional capacity, the scarcity of localized management information, and the dearth of human/physical capital to undertake the necessary managerial and administrative duties.

There are six coastal district councils that have jurisdiction over the marine waters of Sierra Leone and, under the terms of the LGA2004, each is mandated to establish a Fisheries and Marine Committee. This comprises a chairman (who is an elected councillor), other councillors from within the council, representatives from fishers' organizations and fisher communities, community elders and staff representatives co-opted from the MFMR. However, at the time of writing, of the six councils, only Port Loko had been allocated trained fisheries personnel to assist in the management of the resource. Moreover, while all six districts already possessed fisheries outstations—set up by the MFMR prior to the devolution process—that are responsible for data and licence fee collection, and training communities on fisheries management and resource sustainability, research suggests that the new institutional environment has allowed (in some instances) local politicians to subvert the effective operation of these facilities by appointing station managers who have never had training in fisheries management.

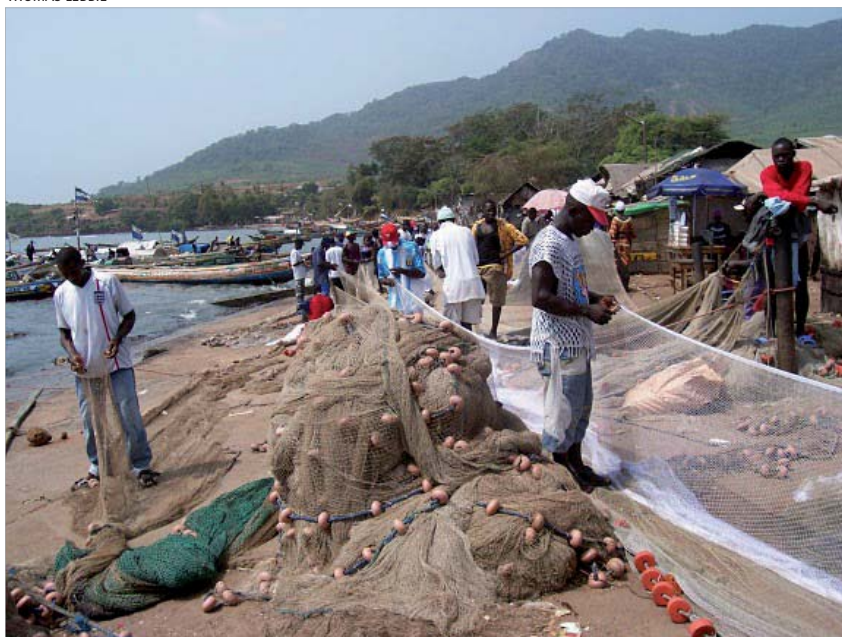
While it is clear that the MFMR currently lacks both the human resource capacity and funding to provide opportune support to the local councils, the councils themselves are further hampered by the pithy sums allocated to them by the central government in the start-up phase. Currently, each council receives the sum of 4 mn Leones (equivalent to just US\$1,000) to run the affairs of an entire coastal district. Although, in the longer term, councils will, or should, become more self-sustaining once robust mechanisms have been put in place to collect licence fees and other duties payable, the current lack of funds severely impedes effective local revenue-collecting procedures.

...decentralization runs the risk of creating more local conflicts and social tensions, particularly if specific ecosystems fall within multiple political/administrative jurisdictions...

central government to hand back productive natural resources to local communities, and a failure to provide sufficient funding for the decentralized authorities.

Moreover, decentralization runs the risk of creating more local conflicts and social tensions, particularly if specific ecosystems fall within multiple political/administrative jurisdictions and/or non-representative local groups or if autocratic customary authorities are able to capture the benefits decentralization brings. These concerns are very much evident in Sierra Leone as the local councils established after the LGA2004 have assumed control over all artisanal vessels—despite

THOMAS LEBBIE



Mending fishing nets at the Tombo wharf, western Sierra Leone.
Six coastal district councils have jurisdiction over the marine waters of Sierra Leone

DelPHE

The British Council Development Partnership in Higher Education (DelPHE) Programme—a collaboration among the Institute of Marine Biology and Oceanography (IMBO), Fourah Bay College, University of Sierra Leone, the Centre for the Economics and Management of Aquatic Resources (CEMARE), University of Portsmouth, United Kingdom, and the Centre for Maritime Research (MARE)/AMIDST, University of Amsterdam, the Netherlands—seeks to help local fisher communities resolve challenges while promoting gender equity in the artisanal fisheries sector in Sierra Leone. The project's immediate impact has been its ability to engage the key resource stakeholders in an interactive manner to identify the strengths, weaknesses, opportunities and challenges presented to them by the new decentralized modality of fisheries governance at the local level.

In addition, the relationship between local councils and local actors—like harbour masters and master fishermen (and their associated roles and responsibilities)—is ill-defined by the present legislation. To date, the Freetown City Council is the only coastal council that has permitted harbour masters to retain 20 per cent of the revenues collected—not just to maximize licence registrations, but also as a means to compensate them for the wide-ranging activities they undertake on behalf of the community. (These include taking care of the harbour in terms of sanitation, and conducting rescue missions, to name but two.)

Concern has also been expressed about institutional responsibilities following government endorsement of the LGA2004. Local fishers have been unable to access justice and have nowhere to channel their concerns—when, for example, their gears were destroyed by trawlers—as the responsibilities of the councils and the MFMR have not yet been properly demarcated. Moreover, producers' organizations such as the Sierra Leone Artisanal Fishermen's Union (SLAFU) and the Sierra Leone Amalgamated Artisanal Fishermen's Union (SLAAFU) are weak, perhaps because they are undemocratic and maintain an uneasy relationship between themselves.

SLAFU represents local fishermen and those in ancillary occupations (such as boat builders, wood cutters, fish processors, basket makers, machinists, transporters, and so on). Formed on 26 December 2001, it aims to harmonize

the concerns of members and act as their collective vanguard. SLAFU develops bye-laws for the sustainable use of resources while campaigning against ecosystem misuse such as fishing with illegal gear and on nursery grounds. Other objectives include improving landing site sanitation and management, prevention of pollution and mangrove deforestation, ensuring safety of fishermen at sea, and resolution of conflicts. The organization was formed by prominent

Local fishers have been unable to access justice and have nowhere to channel their concerns...

fishers in the Tombo fishing community in the Western Area, who make up the executive.

Umbrella organization

Efforts to develop SLAFU into a national organization have been met with resistance from fishers in other areas of the country who see SLAFU as undemocratic (because members did not have a say in choosing those who represent them) and biased in favour of the Western Area where it was formed. SLAAFU, on the other hand, as its name implies, seeks to act as an umbrella organization but has met with resistance from SLAFU; the relationship between the two organizations can best be described as suspicious. The

THOMAS LEBBIE



Boys from the fishing community display their catch in the shallow beach waters of Tombo, western Sierra Leone

There are also clear challenges facing the sector. These include:

- the virtual absence of State structures, and low human resource capacity in local administration systems;
- the inadequacy of the devolved artisanal fisheries function to ensure effective fisheries management at the local level;
- the failure to fully identify roles and responsibilities of all stakeholders;
- limited funds (funds are allocated on a quarterly basis to local councils so as to implement the devolved functions);
- conflicts between/among different resource users and parties like SLAFU, SLAAFU, local councils, fishers and fishmongers;
- ensuring the legitimate election of key local actors like harbour masters and master fishermen; and limiting central government political influence or intervention.

development of an acceptable and democratic producers' organization remains an important concern in the artisanal fisheries of Sierra Leone.

As a consequence of the LGA2004, the artisanal fisheries sector of Sierra Leone offers favourable opportunities for development by:

- bringing the decision-making processes closer to resource users, local actors and interested stakeholders;
- assuring transparency and accountability, since all stakeholders are involved;
- building capacity (in terms of fisheries resource management) at the community level;
- producing management plans with the full participation of local actors;
- identifying needs, including unmet needs, at the local level;
- promoting local or community resource management responsibility;
- ensuring that an enabling framework for sustainable fisheries development and co-management will be created and enhanced over time; and
- incorporating resource user groups like SLAFU, as roles and responsibilities get better defined.

For more

www.illegal-fishing.info/sub_approach.php?country_title=sierra+leone

Sierra Leone Fisheries

www.imcsnet.org/imcs/docs/sierra_leone_fishery_profile_apr_08.pdf

Sierra Leone Fisheries Profile

www.fao.org/fishery/countrysector/FI-CP_SL/en

FAO Country Profile – Sierra Leone

Managing an Ecosystem

The Bay of Bengal Large Marine Ecosystem (BOBLME) Project hopes to promote collaborative fisheries management approaches for the Bay of Bengal

The Bay of Bengal Large Marine Ecosystem (BOBLME) Project is now underway in earnest. The BOBLME covers around 4 mn sq km of sea area. The countries involved—Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand—are among the most populous in the world. Over 400 mn people live in the Bay of Bengal area, and their numbers are increasing rapidly. The majority of them are poor and rely heavily on the area's marine resources, which are being affected by overfishing, removal or degradation of important marine habitats, and pollution.

The eight countries have committed themselves to work together through the BOBLME Project to improve the lives of the coastal populations through improved regional management of the Bay of Bengal environment and its fisheries.

Over two mn people fish the coastal and offshore areas of the Bay of Bengal. This includes a burgeoning population of small-scale fishers who depend on coastal fisheries for their livelihoods and food security, as well as an increasing number of industrial fishing vessels. Both sectors compete for a wide range of species, including sardines, anchovies, scads, shads, mackerels, snappers, emperors, groupers, congers, pike-eels, tunas, sharks, ornamental reef fish, shrimps, crabs, lobsters, octopus, gastropods and bivalve shellfish, sea cucumbers and seaweeds.

One of the major issues facing the region's coastal fishing communities is the fishing pressure which has increased to levels that cannot be

sustained, and many fish stocks are showing signs of being overfished. While catch information is patchy and highly uncertain, there is some evidence to suggest that the fishing pressure in the Bay of Bengal has increased to the extent that catches have risen tenfold over the last 60 years. This situation is exacerbated further by the illegal incursion of foreign fleets, increased competition and conflicts between artisanal and large-scale fishers, encroachment by nationals into the territorial waters of neighbouring countries, and the prevalence of destructive fishing practices.

One of the major issues facing the region's coastal fishing communities is the fishing pressure which has increased to levels that cannot be sustained...

The objective of the BOBLME Project's resources management component is to introduce and promote collaborative fisheries management approaches for selected key transboundary species (highly migratory species or fish stocks shared by several or all adjacent countries) through the development of regional and sub-regional management plans, and harmonization of data collection and standardization.

Management plans

In the first instance, the Project will focus on hilsa, Indian mackerel and sharks, to help develop management plans, and

*This Profile is by **Chris O' Brien** (Chris.O'Brien@fao.org), regional co-ordinator, BOBLME Regional Co-ordination Unit, Bangkok, Thailand*

strengthen data and information collection and assessments of the status of the stocks.

A second key issue is the continued degradation of highly productive coastal and nearshore marine habitats such as coral reefs, mangroves and estuaries, and seagrass beds, which serve as fish spawning and nursery areas. BOBLME will develop an inventory of critical habitats, and

contribute to improve understanding of large-scale oceanographic processes and climate impacts affecting the Bay.

Over the next five years, during what is expected to be the first phase of the Project, the work will focus on strengthening and harmonizing the management capability in each participating country, and gaining a better understanding of the major marine resources and the environment, so that critical issues and the underlying causal agents that are contributing to a decline in the health of the Bay of Bengal ecosystem can be addressed.

The Project will undertake a transboundary diagnostic analysis to identify and prioritize the major regional environmental concerns and their root causes, and produce a strategic action programme to address and remediate them. The Project will also create an institutional arrangement that will serve as a vehicle for the countries to continue their collaborative work into the future.

The involvement of a wide range of stakeholders is vital to the success of the Project. Some activities will focus on developing ways to enable communities to become involved in resource management. Broad participation from government agencies will also be expected as the Project covers areas that will concern a wide range of Ministries (other than those for Fisheries and Environment). In doing so, it is hoped that the Project will contribute to the strengthening of the working relationships between government agencies, and co-management arrangements between local governments and communities. The Project is also looking to draw on the considerable expertise and experience that exists in the many and varied regional bodies and non-governmental organizations that operate in the area; and the Project team is very interested to hear from any potential collaborators.

FAO execution

The Food and Agriculture Organization of the United Nations (FAO) Regional Office for Asia and the Pacific in Bangkok is executing the Project. FAO

The involvement of a wide range of stakeholders is vital to the success of the Project.

assist in developing a regional ecosystem health monitoring framework that addresses regional coastal pollution issues and water quality criteria. BOBLME will also provide support to bi-national, collaborative critical habitat management in two pre-selected pilot areas: the Mergui Archipelago (Myanmar, Thailand) and the Gulf of Mannar (India, Sri Lanka). It will also promote the protection of coastal habitats, in particular the use of fish refugia as management tools to conserve and rebuild fish stocks. On a broader scale, the BOBLME will

ROLF WILLMANN

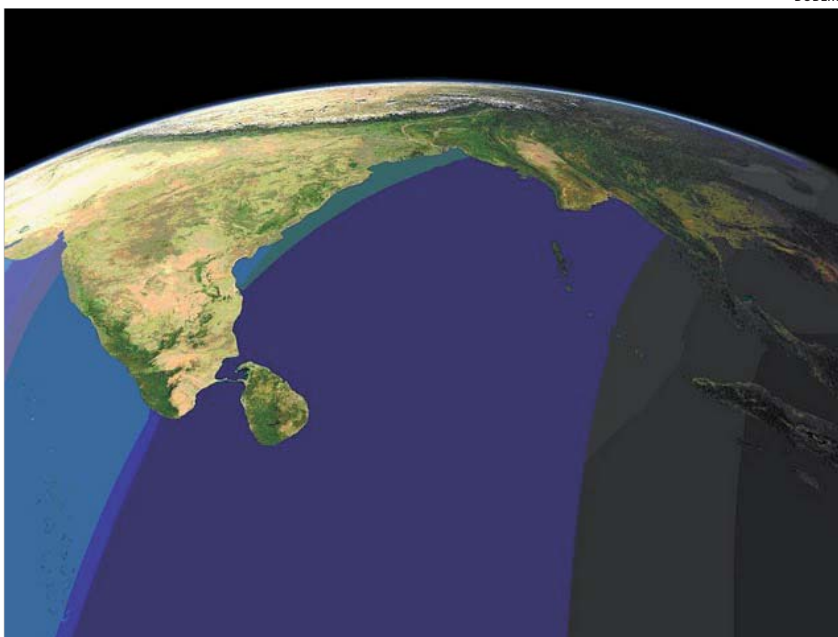


An artisanal fisherman from Sarawak, Malaysia. The BOBLME project will focus on strengthening the management capability in each participating country

has been working in the Bay of Bengal area for over 50 years in the areas of agriculture, forestry and fisheries, in support of food security, rural poverty alleviation and institutional and human capacity building. Given FAO's considerable expertise in fisheries and resource management, the Project will also be implementing the ecosystem approach to fisheries (EAF) management that it has championed over the last decade. The EAF represents a move away from fisheries management systems that focus only on the sustainable harvest of target species towards systems and decision-making processes that balance environmental well-being with human and social well-being within improved governance frameworks. It is underpinned by the FAO Code of Conduct for Responsible Fisheries.

The BOBLME Project is ambitious and challenging. But there is a clear willingness by both the governments and the communities to make a change. Although many of the current problems facing the Bay of Bengal countries have been decades in the making and are firmly entrenched, there are encouraging signs that indicate that management is changing its approach. Increasingly, there are reports emerging where critical areas are being identified and protected, unsustainable fishing practices are being banned, and livelihoods are being improved. Importantly, there is a substantial commitment in terms of finance and resources the countries have made to the Project and their determination to work together on common problems and resolve them.

This unique and important project took over ten years for all partners, governments, donors, and United Nations organizations to conceive and jointly design. In many ways, it is an extension of the Bay of Bengal Programme (BOBP). The BOBP was a long-term regional fisheries programme, implemented by the United Nations Development Programme (UNDP) and FAO, which ran for over 20 years and in which Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand participated. In



Many of the current problems facing the Bay of Bengal countries have been decades in the making and are firmly entrenched

its first two phases, the BOBP improved the socioeconomic conditions of the small-scale fisherfolk through the development and promotion of new and innovative techniques and technologies. The third phase of the project addressed more directly the serious management problems facing the Bay's fisheries. It assisted the national institutions responsible for fisheries management in setting directions and accelerating the development of sound fisheries management policies and practices. It was during this latter phase that the BOBP countries realized there was a need to manage the coastal and marine resources, including the environmental threats to those resources, in a co-ordinated, comprehensive and integrated manner—so the BOBLME Project was developed.

The BOBLME Project is funded principally by the Global Environment Facility (GEF), Norway, the Swedish International Development Co-operation Agency, FAO, and the National Oceanic and Atmospheric Administration (NOAA) of the United States, with a total estimated budget of US\$31 mn. FAO is the executing agency.



For more



www.boblme.org
Bay of Bengal Large Marine Ecosystem Project

www.lme.noaa.gov
Large Marine Ecosystems of the World

www.seaaroundus.org/lme/
Seas Around us: Large Marine Ecosystems

Sharing the Wealth

The Danish case shows that a fruitful combination of rights and responsibility can incentivise fishers to strive for the best achievable result

18

Thorough analyses of fisheries policies have been carried out and numerous recommendations been made. Yet, most fish stocks are overfished, most fishing communities are economically underperforming, and most fisheries regulations have failed in one respect or the other.

The Danish approach to solve the management crisis has been to define a framework that incentivises fishermen to use their skills and ingenuity to the benefit of their own economy and the resource at the same time.

Denmark introduced individual transferable quotas (ITQs) in 2003 and 2007 as a means to adapt fleet capacity to fishing opportunities, to obtain a viable economy and to benefit the coastal fishery. This was a national option as Member States of the

Kingdom and Scotland in a joint statement agreed that a new fisheries policy must be developed, based on CQM where the fisher accounts for all the fish he removes from the sea and not just the fish he chooses to land.

On 1 January 2003, Denmark introduced ITQ management in the pelagic fishery and on 1 January 2007 in the more complex demersal fishery. The political agreement followed more than a decade of fruitless discussions and it was only supported by a narrow majority in parliament.

The objective of the ITQ management is to generate a high economic result and an effective use of the resources by giving the individual fisher a high degree of freedom to plan his fishery and his investments in the fishery. The political parties were aware that ITQ management is a powerful instrument for economic efficiency. The system was designed to support a competitive coastal fishery, improved entrance for young fishermen, and reduction of discards.

Only registered fishermen or fishing companies who have more than 60 per cent of their earnings from the fishery can participate in the ITQ fishery, and the vessels have to be owned by fishermen. This to ensure that the benefits from the fishery stay in the fishing communities.

Special considerations

The initial allocation of the right was given as a certain share for the individual fish stocks, based on the fishers' and the vessel's actual fishery in three preceding years. Special considerations were taken in relation to vessels with a non-typical fishery

The objective of the ITQ management is to generate a high economic result and an effective use of the resources...

European Union (EU) are responsible for allocating the national quotas derived from the EU resource policy.

With regard to the EU resource policy and its pending revision, Denmark has proposed a shift in management from 'regulation and control' to 'incentives and documentation'—also termed as 'catch quota management' (CQM) in contrast to present management, which is a management of landing quotas.

On 8 October 2009, Ministers from Denmark, Germany, the United

*This article is by **Mogens Schou** (msc@fvm.dk), Adviser to the Minister of Fisheries, Denmark*

(wreckage, change in ownership, etc.). All vessels with a yearly revenue more than 30,000 Euros were included in the ITQ scheme. The residual—and insignificant—part of the fleet is still regulated by rations.

The fish is a public resource and the ITQ share is subject to withdrawal with eight years notice. By giving the fishermen a share that reflected their actual fishery, the management accommodated the fishermen who were opposed to ITQs. The argument was that these fishermen would not seriously be affected by the system as they were not forced to buy or sell rights but could continue their normal fishery with the allocated ITQ shares reflecting their historic performance—a situation that would not be possible if the rights had been distributed through, for example, an auction.

A flexible use of the quotas was given high priority. The ITQ model allows for both structural adaptation through permanent selling of the shares and for day-to-day flexibility by allowing leasing of quotas and co-operation in fish pools. Also, the pool system was aimed at supporting co-operation in the individual harbours on the best use of the available fish and on the use and development of the harbour infrastructure and facilities.

Thus, the main criteria for an effective ITQ management—ownership and transferability—are met to a very high degree. The 'fish pool' has shown to be a very popular and efficient instrument. While buying and selling of rights on a permanent basis must be registered with the Directorate of Fisheries, leasing and swapping within the quota-year can be done in a flexible way in the fish pool without notifying the directorate. Fish pools are established on a private basis, are managed by a pool master, and must be approved by the Directorate of Fisheries. The pool must ensure that the total yearly quota allocation for its pool members is respected. Seven pools are in operation, and most of the catches of demersal species are taken by vessels in the pool system. All pools operate on a common website (www.puljefiskeri.dk), where the fisher may do his swapping or leasing online.

Leasing and swapping of quotas make it possible for the individual fisher to fine-tune the allocation to his day-to-day activity. He may even catch fish outside his quota in a mixed fishery, and remedy the situation by leasing the necessary amount after having landed the fish, a possibility that gives the fisher better economy and reduces discard of non-quota species.

The ITQ model allows for both structural adaptation through permanent selling of the shares and for day-to-day flexibility by allowing leasing of quotas and co-operation in fish pools.

The pools have introduced a rule, that no fish must be discarded as long as one fisher in the pool has a quota. While this is not a 100 per cent guarantee against upgrading, it has increased awareness about good practices, and reduced discards.

Any registered fisher may enter a pool. The advantage of being in the pool is that leasing and swapping of quotas are made very flexible. The fisher enters the pool with the fish allocated to his vessel. Most pools merely operate as a facility for the individual fisher to swap and lease fish for his vessel. In this situation, the fisher has full control of his individual rights. One pool in Thorupstrand is based on a share system or co-operative. Here the

MOGENS SCHOU



A modern, demersal trawler at the large harbour of Hanstholm, on the west coast of Denmark

individual shares are treated like one, and managed by all the members jointly. The basic principle in this co-operative is that a fisher can become a member by paying a fixed, low entrance fee. Thereby younger fishers without quotas have an opportunity to enter the community quotas on the same conditions as the founding members. This prohibits extraction of the surplus from the co-operative. To

Today most fishermen fail to understand why it took so long to introduce ITQs.

the extent that the pools respect the fundamental requirement of precise and reliable catch registration, they have a large margin for developing their mode of operation.

Also, socio-political considerations are given high priority in the management. In order to support the coastal fishery, shares of the most important stocks have been set aside as a premium for vessels below 17 m. Participation in the coastal segment is voluntary. Once the vessels enter the segment, they have to stay there for three years to receive the premium. In this period, they cannot sell fish out of the segment, they cannot increase the size of the vessel and they have to conduct a coastal fishery. In a situation with many coastal vessels, the individual premium is relatively small, and should the interest and thus the number of vessels diminish, the individual premium will consequently increase. To illustrate with a few figures: the coastal fleet fishes in the order of 30-40 per cent of the important stocks of plaice, sole and cod.

A small share of fish is set aside in the Fishfund. The size of the share is fixed on an annual basis. This instrument can be used to allocate fish to fishermen or vessels to support, for example, collection of data, innovation, and so on. For the time being, fish from the Fishfund is allocated to young fishermen who invest in a vessel for

the first time. With the establishment of the Fishfund, it was not considered necessary to introduce a formal resource tax in connection with the introduction of ITQs.

Other elements in the ITQ model are rules for concentration of ownership of rights, and the stipulation that one must be active in the fishery to uphold the ITQ.

The results of Danish ITQ management are very positive. In 2007-08, the fleet was reduced by about 25 per cent, and it is now in balance. At the same time, profitability increased from 9 per cent to 20 per cent, and the investment rate more than doubled, as old vessels were replaced by new, and investments in value-added equipment rose as fishermen started focusing on value rather than quantity.

The coastal fishery became competitive under the new regime. The segment has actually increased its share of the most important demersal stocks. Today most fishermen fail to understand why it took so long to introduce ITQs.

The timetable for the implementation of the system shows a rapid process once the political decision was made. The policy was decided in November 2005. The legal framework was in place in December 2005. The big task of calculating, allocating and deciding on appeals regarding the initial allocation was finished in November 2006. The management was fully functioning by 1 January 2007 and the structural adaptation of the fleet was in place in mid-2008.

ITQ management has strong economic and distributional effects. In that context, it was important to ensure a clear connection between the Danish policy objectives and the concrete regulation. In the process of establishing the system as well as managing it, some lessons were learned.

Fishers' perception

The initial allocation of rights must be fair and broadly accepted. It is a financial active that is distributed, and fairness is very sensitive in relation to the individual fisher's perception

of the system. A significant number of discontented fishermen will be poisonous to the political acceptance and development of the system.

How will the market for ITQs develop? In Denmark, we were concerned about striking the right balance in the new market created for fishing rights. Would fishermen buying ITQs to stay in the fishery pay too much for the right, leaving only little money for investment in the industry? This showed not to be the case, and even if the present crisis has reduced profitability and the value of the fishing rights considerably, fishermen and the financial institutions do not consider the situation critical.

ITQs and transferability are often considered as the path to concentration, capitalistic exploitation and closure of coastal societies. The Danish experience here in the fourth year of ITQ management is that ITQs can be of net benefit to the coastal fishery and it can serve other political and societal priorities. It is important to make a distinction, however, between structure and overcapacity. While it is perfectly possible to ensure a structure benefitting small-scale fisheries, it is not within the logic of ITQs to allow overcapacity to persist. Thus, introducing ITQs in a situation with overcapacity will result in fewer vessels and empty spaces in some harbours. In the Danish case, the most industrious harbours thrived. It was interesting to see that Esbjerg, one of the biggest harbours, is now more or less closed as a fishing harbour, while some small harbours and 'fishing beaches' are doing well.

The Fishfund constitutes an instrument capable of supporting the development of the fishery and its needs to make adjustments in the allocation. This, however, was not necessary in the Danish case, and adjustments of allocations should, in any circumstance, be handled with care.

The results of the Danish ITQ model were expected, and there were no surprises. But the speed at which the fishermen adapted to the new situation by structural adaptation and building the fish pool as a new institution took everybody by surprise. This prompt



Esbjerg, one of the biggest harbours, is now more or less closed as a fishing harbour, while some small harbours and 'fishing beaches' are doing well

and very constructive change in the fishermen's way of conducting their business led to the belief that they might also successfully assume the main responsibility for the management of the resource.

ITQ models give the opportunity, but not the guarantee, for a sustainable fishery. Discards of less valuable fish (upgrading) and illegal fishery do not disappear with ITQs.

In September 2008 Denmark presented a proposal for a new fisheries policy in the EU based on CQM. The feature of CQM is that fishermen are accountable for all their

...introducing ITQs in a situation with overcapacity will result in fewer vessels and empty spaces in some harbours.

catches, whether they are landed or discarded at sea. The proposal entailed that fishermen, on a voluntary basis, could participate in the scheme. As they would count all catches, they would be given increased quotas for their vessel.

Fundamental change

This was a fundamental change from the present management based on landing quotas combined with numerous rules and controls to manage the fishers' behaviour at sea—

all with the aim of reducing discards and illegal fishery.

By choosing the CQM scheme and staying within it, fishermen would have to accept the burden of proof. They would have to establish reliable documentation of their total catches. Denmark suggested that such documentation would have to carry a very high credibility in the form of a closed-circuit television (CCTV) and sensor documentation system on each vessel in the scheme.

With the introduction of a CQM instead of landing quotas, the fisher would be responsible for his total take of the stock, and his incentive to optimize the value of the landed fish by discarding would be exchanged with his incentive to optimize the value of the total catch by fishing more selectively.

Denmark backed the proposal with a comprehensive pilot project to demonstrate the potential of a CQM based on the true figures of the take of fish stocks. In September 2009, Denmark ended a 12-month pilot

project with six vessels equipped with cameras and sensors. The project produced convincing results in relation to obtaining full accountability of all catches, reducing discards and changing fishermen's behaviour. The participating fishermen supported the idea and the practical implementation of the project. The results of the project can be seen at www.fvm.dk/yieldoffish

On the basis of the joint statement of 8 October 2009, the EU decided to introduce a CQM element as a trial on a limited scale in 2010. Denmark, England, Germany, Scotland and Sweden are now preparing a CQM management for around 80 vessels in European waters in 2010.

The continuation and development of the CQM in 2010 will show whether the introduction of an alternative management track can provide the benefits of correct registration of catches, precise data for biological advice, simplified regulations, better stock utilization pattern and abandonment of discards. In relation

Extract from the Danish, German and UK joint statement

We believe there are strong arguments for making fishermen more accountable for their total catches. It would improve information and management of removal levels of fish stocks and incentivise the development of selective fishing methods, gear and technology that can optimize the value of catches while significantly reducing the wasteful practice of discarding. We therefore wish to explore the scope for testing voluntary and incentive-driven management mechanisms based on catch rather than landing quotas. We would wish that fishermen choosing such an option carry the responsibility of documenting their total catches, and that the requirements for such documentation must ensure unequivocal reliability.

Our work to date on camera documentation and non-discard projects shows us that full documentation can be a feasible solution. However, we also recognize that further work needs to be done more generally to provide the necessary evidence and confidence to support this possible change in approach. We are therefore keen to work with the Commission and the Council - and with fishermen themselves - to refine our ideas and explore the potential to apply them during 2010 and for them to be a valuable reference point in the development of a new and more effective CFP.

Signed in Aalborg, 8 October 2009, by

Eva Kjer Hansenlise Aigner

Huw Irranca-Davies

Richard Lochheed

ITQ and CQM Management

	Baseline	ITQ	ITQ and CQM
Landings (tonnes)	100.000	100.000	100.000
Profit (million €)	9	46	39
Profit (million €), discard included	-16	21	39

Note: Model calculations by the Institute of Food and Resource Economics, University of Copenhagen; (www.foi.life.ku.dk), for calculation, contact Hans Frost, associate professor or see background paper at www.fvm.dk/yield of fish.

Baseline: Landings of 100.000 tonnes demersal fish. An overcapacity of 38 per cent and a discard of 20 per cent is assumed.

ITQ show the improvement in profit with an ITQ system with full market effect (discard 20 per cent). This can generate a catch surplus of 34,200 tonnes that can be distributed for sociopolitical purposes.

ITQ and **CQM** show the profit following introduction of an ITQ and CQM management.

to the huge public costs of managing and controlling fisheries, it will provide important information about the cost efficiency of this alternative method.

The fishery should generate wealth to fishing communities and to society in general. Today this is seldom the case. The Danish case shows that an ITQ management can be designed to accommodate both political priorities and economic efficiency. Thus the capital invested in the fleets can be minimized, and overcapacity removed. Similarly, the output value of the resource can be maximized if the individual fisher is incentivised in relation to his total catch and not just to the fish he chooses to land.

Management by transferable rights gives the maximum incentive to optimize capital input. This is the key to balancing fleet capacity, catching opportunities and regaining a sound economy. CQM ensures the maximum incentive to fish selectively and to bring all fish to the market. This is the key to optimal exploitation of fish stocks.

On the basis of the ITQ experience and the CQM trial with six vessels, the Danish Institute of Food and Resource Economics made a very crude calculation of the benefits of such management. The calculation cannot be seen as representative for the fisheries of the world. Nevertheless, the result suggests that ITQ and CQM management might be worth considering for most world fisheries (see box above).

It can be seen that ITQ management alone will result in an efficient use of the fleet in the fishery. At the same time, a considerable loss can be expected on the basis of strong empirical data regarding upgrading and other discards. The profit to the fishery is 46, while society enjoys a profit of only 21. If both ITQ and CQM are introduced, the profit for the fisher and for society are equal as the fisher cannot improve his earnings by overtaxing the resource.

Thus, the Danish conception of the wealth that should be derived from fisheries is:

- when the capital used to catch fish does not exceed what is necessary; and
- when the value of the resource is obtained on the basis of its full productive capacity for society, and not just on the highest valued fraction for the fisher.

The concept of CQM should enjoy a more widespread consideration as a tool to improve the global use of marine resources.

For more



www.fvm.dk/Default.aspx?ID=24957

**Denmark Ministry of Food,
Agriculture and Fisheries**

www.fvm.dk/Admin/Public/DWSDownload.aspx?File=%2FFiles%2FFiler%2FEnglish%2FFisheries%2FJoint_statement_okt2009.pdf

**Joint Statement of Danish, German,
UK and Spanish Ministers**

www.puljefiskeri.dk/
FishPool

Fishing Sustainably

A study by the collective, Pêche et Développement, reveals the initiatives that small-scale fishermen in Brittany have taken for sustainable fishing

Given the structural problems facing fishing activities, and the current economic uncertainties, small-scale fishermen in Breton, Brittany, France, have taken several initiatives to innovate and work for fair practices and a sustainable management of marine resources. These have been corroborated in a study by the Lorient-based collective, Pêche et Développement, which found that the crisis in fisheries is a complex reality.

The exploitation of 'noble' species, which were closest to the coast, has intensified and, over time, there has been a diversification of the species caught in the same area. There has also been a geographical extension of

Fishermen have themselves fought against environmental degradation and for resource restoration. In South Brittany, in the Pays Bigouden, fishermen, oyster farmers and environmentalists have worked together to restore and maintain the quality of the estuarine environment that are so important in ecological cycles. For a decade, the association, Cap 2000, has brought together oyster farmers, fishermen and farmers from Morbihan in south Brittany to act to ensure good quality of water. In Côtes d'Armor in northern Brittany, the fishermen have set up an association, AREVAL, to find solutions to the ecological problems caused by an invasive species, namely, the Crepidule (Sea Snail).

Fishermen catching lobsters in the Gascogne Gulf had to deal with the problem of their trawl nets' selectivity. They worked hard to adopt more selective gear. Scientists have lauded their effort, estimating that about 14 mn immature hakes are saved each year due to their measures.

Fishermen in Côtes d'Armor in northern Brittany have decided to establish zones (*La Horaine*) where only line fishing is permitted. There, as part of the programme called V-Notching, launched by the local committee of fisheries in Paimpol-Lannion, female lobsters have been reintroduced. All along the Breton coast, cuttlefish fishermen have adapted their pots to reduce mortality and to allow conditions for hatching.

Small-scale co-operative

In the 1970s, members of a small-scale fishermen's co-operative on the island of Houat in southern Brittany

To face the crisis that has been affecting them since the early 1990s, fishermen's organizations have taken control of the management of fishing zones...

fishing pressure, with fleets spreading into new zones and repeating the processes of exploitation and diversification. Yet, the crisis in fisheries cannot be attributed only to the crisis in resources and overfishing. Fishermen have to put up with the degradation of the coastal environment and the local consequences of global climate change. To face the crisis that has been affecting them since the early 1990s, fishermen's organizations have taken control of the management of fishing zones, and have developed numerous complex practices adapted to their territories and needs.

This article is by **Bastien Malgrange** (malgrangeb@googlemail.com) of Collectif Pêche et Développement, Lorient, France

built a hatchery that allowed them to raise immature lobsters, which were then transferred to the wild. In Brest Bay, for the last 30 years, fishermen have been leaving seeding zones fallow to let scallops grow until they reach the proper size for the market. Similar projects exist in Morbihan for oysters, clams and abalones.

There have also been some initiatives for the development of alternative energy, although they are still very limited. Fishermen, for instance, are opting for sails. In Douarnenez Bay, a fisherman collecting shellfish with a drag-net has equipped his boat with winding jibs, which helps him save up to 20 per cent on fuel, whenever winds are favourable.

Cheap imports and the collapse of demand from Spain, which was once the main importer of marine products from France, have weakened the fishing sector. Since the fisheries crisis of 1992-93, Breton handliners have got together to create a collective brand, styled as the “hand-liners of western Brittany”, mainly for bass. This has led to transparency and traceability in marketing, ensuring both quality for the consumer and better prices for fishermen.

The experience of AMAPs (Associations pour le Maintien de l'Agriculture Paysanne, or Associations for the Maintenance of Farming) is being replicated in fisheries. In Lorient, for instance, LEPAR (Lorient Ensemble Pour le Soutien à une Pêche Responsable) has been set up to link small-scale fishermen and consumers through weekly contracts for distribution of marine products. Forty fishing families have committed to sell their catch each month to two trawler fishermen.

Elsewhere, the fishermen of Saint-Brieuc Bay have for long controlled their fishery by devising new, less intensive, fishing techniques, and by establishing a fixed licensing quota. Part of the money raised is used for monitoring, control and surveillance activities. Over 500 fishermen and their 250 boats can thus be assured of a secure future, even as wind farm projects come up in the middle of their



Jean-Jacques Tanguy, a fisherman from Muguérec, Northern Finistère, France. Cheap imports and the collapse of demand from Spain have weakened the fishing sector

fishing zones. Other coastal areas are scientifically managing their resources as well: clams and cockles in Pont Labbé, for example, and scallops in Morlaix, Brest Bay, Glenan. Another example is the management of seaweed harvesting in Iroise and Northern Finistère, through a sharing of fishing zones between trawl nets and passive gear.

The fishermen of Brittany have themselves invested in the future by setting up the Parc National d'Iroise, the National Marine Park of Iroise, which is a remarkable example of how fishermen, scientists, environmentalists and government authorities can work together to manage fisheries and protect biodiversity. With the creation of the park, other initiatives such as labelling or the development of abalone fishing have been made possible.

For more

www.pecche-dev.org
Collectif Pêche et Développement

www.ifremer.fr/anglias/
**French Research Institute for
 Exploitation of the Sea**

www.ifremer.fr/docolec/notice/1989/notice2202-EN.htm
**Coastal Fishery Dynamics in
 Brittany, France**

No Time for Dissension

World Fisheries Day was celebrated at Lorient, France, with a two-day conference that gave hope and optimism for reforming the basics of fisheries management

On 20 and 21 November 2009, Pêche et Développement, the non-governmental organization based in Lorient, France, which is a fishing and development collective, organized celebrations at the famous Brittany port to mark the World Fisheries Day. Set against the context of the current reform of Europe's Common Fisheries Policy (CFP), the collaborations and synergies found in the sector gave an optimistic and hopeful tone to the debates that animated the two days of conferences.

World Fisheries Day dates to 21 November 1997 when the World Forum of Fish Harvesters and Fishworkers

fisheries", said Ben-Yami. According to him, such management is founded on an obsolete and inappropriate science, which fishermen have absolutely no means to challenge. This is due to the prevalence of mathematics and exact science to the detriment of other kinds of knowledge.

According to Ben-Yami, scientific fisheries management suffers from two major handicaps: firstly, it considers fishing as the only factor causing the fluctuation of stocks; secondly, it is based on models that isolate species instead of considering the interactions that exist between them. According to him, that makes it an "ecologically absurd management" that takes no account of the ecosystem approach.

A strong promoter of professional knowledge and knowhow, Ben-Yami emphasizes the need to consider fishers as experts in management matters. He is equally critical of the pre-eminence of quantitative, often "speculative" and "fantasist" scientific data, as well as its manipulation. "Since the invention of the computer, people believe that statistics alone suffice to evaluate fish stocks. It's more comfortable than going to take a look to see what's happening in the sea", he concluded.

Empirical knowledge

The discussions that followed brought to light the elements essential for an effective partnership between fishers and scientists. Benoît Guérin, Secretary of the South Western Regional Advisory Council (SWRAC), underlined the need to formalize the empirical knowledge of professionals in order for this to be recognized, and to confront scientists with their contradictions. André le Berre, President of the Brittany

Since the invention of the computer, people believe that statistics alone suffice to evaluate fish stocks. Its more comfortable than going to take a look to see what's happening in the sea.

—Menakhem Ben-Yami

(WFF) met in New Delhi, India. Annual celebrations are held on this day to highlight the social and economic importance of artisanal fishing in all the regions of the world. Each year, this day highlights both the solidarity existing between fisher associations and the current challenges facing the sector.

Day one, dedicated to a "Critique of Scientific Fisheries Management", was introduced by Menakhem Ben-Yami, former fisherman, ecologist and expert on Israeli fisheries. Ben-Yami highlighted the inadequacy of the rarely questioned bioeconomic approach to fisheries management. "Managers advised by scientists never question the basic fundamentals of

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Regional Maritime Fisheries Committee (CRPMEM), stressed that such a development would require, above all, that the image of fishers as 'pillagers' and 'liars' be abolished. René Pierre Chever, Secretary of the Guilvinec Local Sea Fisheries Committee (CLPMEM), explained about the lack of confidence between fishers and scientists. All agreed to work to reinforce collaboration, for a management system closer to the realities of the sector.

A roundtable was organized with the main theme, "Fishers Are Also Experts". Xoan Lopez, Secretary of the Galician Federation of Cofradías, was the first to intervene. He came back to the need for a deep reform of fisheries management, putting the accent on the expertise of the professionals. According to Charles Braine, fisheries specialist for the World Wide Fund for Nature (WWF), the objective of collaboration between scientists and fishers is to come up with systems other than total allowable catches (TACs) and individual transferable quotas (ITQs), regarded by fishers as a benchmark that is poorly adapted to living resources. "We must continue along these lines, which come from the bottom up, and try to establish long-term management plans", he concluded.

At the end of the first day, Alain le Sann from Pêche et Développement commented on the generalized apprehension shown by fishermen with regard to scientists. "We are embarked on collective reflection", he concluded.

The second day's theme was "Responsible Fishery Initiatives, Developed by Fishers, for Another Kind of Common Fisheries Policy". Danièle le Sauce, President of Pêche et Développement, introduced the day with the following words: "For too long, fishers have delegated. For too long, decisions have been taken on their behalf. The best way to take their initiatives into account is when it is they themselves who valorize them."

Bastien Malgrange, responsible for research at Pêche et Développement, presented "Responsible Fishing Initiatives" initiated by fishers along the Brittany coast. Amongst these "good practices", both individual and

collective, we find the management of scallop fishing in the Bay of Saint Brieuc, and the creation of the Iroise Marine Park, as well as the improvement of selectivity in the lobster fishery in the Bay of Biscay.

Malgrange emphasized the key role of "initiative takers" and "innovation transmitters" in

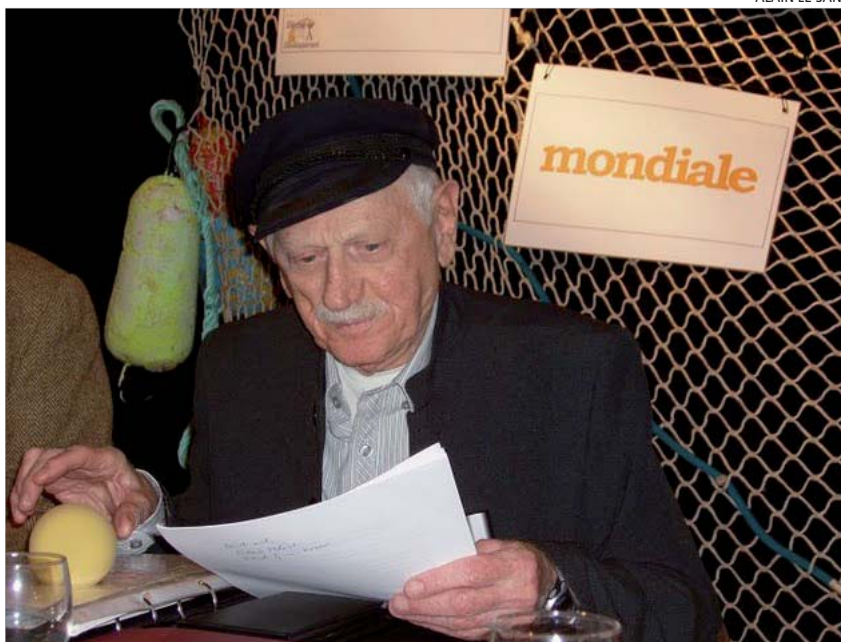
We must continue along these lines, which come from the bottom up, and try to establish long term management plans.

—Charles Braine

establishing responsible and sustainable activities. He also underscored the need, at the local level, for an evolution towards decisiontaking oriented towards the long term. "Such advances in management systems are incompatible with policies that favour globalization and uniformity", he concluded.

It is with this perspective that Romain Verger, a line fisher from Ouessant, presented his work for valorizing products caught by line fishing. He expressed his fears about the use of ITQs or other instruments synonymous with the transfer of

ALAIN LE SANN



Menakhem Ben-Yami, fisheries adviser, Israel, at a workshop in Lorient, France, discussing the elements needed for an effective partnership between fishers and scientists

ALAIN LE SANN



The issue of gender is, in effect, rarely brought up in strategic and operational plans of Member States of the European Commission

as well as affording them greater participation in the decision-taking processes.

The subject of the fishermen's *prud'homies* and good practices in the Mediterranean was described by Elisabeth Tempier from the Mediterranean antenna of Pêche et Développement. These traditional management institutions have experienced a series of upsets in recent decades that point to an end of the logic of sharing that characterized the 1960s. This territorialized and democratic system, founded on community principles of respect for people and resources, faces an expansionist and deregulated system, based on individual freedom for investment and innovation.

Tempier explored the options available for the future: "The dilemma that we face today, and which is posed by the Green Paper and on which we are reflecting, is to know which model of development to choose". She selected three possibilities: integration of fishing in the global market for the benefit of large companies; the ring fencing by large environmental groups of the resources on which fishing communities depend; or the integration of fishing into a regional development plan. According to Tempier, this third possibility seems the most able to reconcile the socioeconomic objectives of fishing communities with the needs for environmental sustainability (see "In the Balance", page 24, *SAMUDRA Report No. 54*).

Tempier underlined the positive potential of such regional fisheries integration in the Mediterranean and the role of *prud'homies* in the integrated use of coastal areas, with the participation of fishers as well as the tourism sector and other users of the coastal area.

Fisheries management

Menakhem Ben-Yami made a second intervention, this time about the issue that fisheries management becomes ineffective if it is perceived by the fishermen as erroneous or false: "Fisheries management, instead of being conceived with the participation

resource access rights, and denounced the absurd profit margins taken by the distribution chains. Calling for qualitative and quantitative approaches, he underlined the ineffectiveness of the current CFP: "The system of subsidies has allowed the fishery sector to be drip fed, but with deeper reflection, it is clear that this is going to fail".

Katia Frangoudes, member of the AKTEA network and researcher at the European Institute of Marine Studies (IUEM) in Brest, broached the subject of women's role in fishing

The system of subsidies has allowed the fishery sector to be drip fed, but with deeper reflection, it is clear that this is going to fail.

—Roman Verger


communities. According to her, this role remains particularly unrecognized, including by the fishermen themselves. In effect, the tasks undertaken by collaborative spouses, and even their roles in processing and sales, are often relegated to secondary importance. The issue of gender is, in effect, rarely brought up in strategic and operational plans of Member States, as in the case of the European Commission's Green Paper on the reform of the CFP. She advocated greater recognition for women's groups in the world of fishing,

of fishers, is essentially conceived through a 'big brother' approach”.

He contrasted two systems of fisheries management: the one based on “output” and the other on “input”. According to him, the former (based on quotas) favours concentration in the hands of large companies but without assuring that the resource is safeguarded, while the latter (based on inputs) leaves artisanal fishing some margin to manoeuvre.

On this matter, Ben-Yami mentioned the work of Elinor Ostrom, the 2009 Nobel Prize winner for economics, by clarifying that “numerous coastal fisheries have been well managed by local communities who control access, the fishing rights and means, etc. Often they do better than the State or privatized systems”.

The debates following this presentation provided the occasion to put the accent back on the need for decentralized fisheries management. Alain Cadec, European Deputy and Vice President of the Fisheries Committee of the European Parliament, argued that territorialization has an essential role to play in community policies, with respect to the particularities of each region. Xoán López considered that a differentiated management for each local group was a basic condition for designing the fisheries of the future and allowing the application of appropriate management measures towards 2020.

World Fisheries Day 2010 was closed on a positive note by the Chair, Danièle le Sauce. The dialogue opened up by the process of CFP reform allowed professionals, from both the industrial and artisanal sectors, to reflect on reforming the basics of fisheries management. “There is not sufficient time for dissension”, the Chair concluded. 

The dilemma that we face today, and which is posed by the Green Paper and on which we are reflecting, is to know which model of development to choose.

—Elisabeth Tempier

For more



eussf.icsf.net/

ICSF's Website on Small-scale Fisheries and EU CFP Reform

www.peche-dev.org

Collectif Pêche et Développement

Dubious Protection

Recent workshops held to assess the Convention on Biological Diversity's Programme of Work on Protected Areas drew attention to the need for space for indigenous and local communities

30

Can we achieve full and effective participation of indigenous and local communities in the management of existing, and the establishment of new, marine protected areas (MPAs) by 2008, promoting equity and benefit sharing? Are these two goals of the Programme of Work on Protected Areas (PoWPA) of the Convention on Biological Diversity (CBD) achievable in the near future in a context in which country-level strategies to protect marine biodiversity often ignore these human-rights imperatives?

These were the questions asked by all three of the representatives of the

equitable sharing of both costs and benefits arising from the establishment and management of protected areas by 2008; and 2.2: Full and effective participation of indigenous and local communities, in full respect of their rights and recognition of their responsibilities, consistent with national law and applicable international obligations, and the participation of relevant stakeholders, in the management of existing, and the establishment of new, protected areas by 2008.

The Conference of the Parties (COP) to the CBD is planning to review the implementation of the PoWPA at its tenth meeting (COP10) in Nagoya, Japan from 18 to 29 October 2010. There have been a series of follow-up initiatives to the PoWPA after its adoption in 2004. In 2006, COP 8 requested the Secretariat to organize regional and subregional capacity-building and progress-review workshops, and these were held in 2007. COP 9, held in 2008, asked the Secretariat to again organize workshops as part of the preparatory process (COP Decision IX/18A), to review the implementation of PoWPA in Asia and Pacific, Africa, Latin America and the Caribbean, and the central and eastern European regions.

Focal points

These regional workshops were meant to target the government focal points for PoWPA in the respective regions. Representation from non-governmental organizations (NGOs) working in the region and from the indigenous and local communities was encouraged. The objectives of these workshops were to review the progress in

The PoWPA is a multi-year programme with 16 major goals and sub-goals aimed at giving substance to the CBD objective of developing ecologically representative networks of protected areas.

International Collective in Support of Fishworkers (ICSF) who attended the Regional Workshops in Asia, Africa and Latin America on the Review of Implementation of the PoWPA organized by the CBD Secretariat during October and November 2009. The PoWPA is a multi-year programme with 16 major goals and sub-goals aimed at giving substance to the CBD objective of developing ecologically representative networks of protected areas. Specific goals and targets have been developed for each of the major goals.

Of central importance to small-scale fishing communities, Programme Element Two identifies two key goals: 2.1: Establish mechanisms for the

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implementation of the PoWPA, and propose ways and means for strengthening the implementation of the programme of work post-2010.

The workshops had a common structure with presentations on (i) integrating protected areas into wider landscapes and seascapes; (ii) governance; and (iii) status of implementation of the PoWPA. The presentation on governance provided inputs on the various types and quality of governance in protected areas, specifically distinguishing 'management' from 'governance'.

The Africa Regional Workshop was the first in the series, hosted in Côte d'Ivoire during 5-9 October 2009, with representatives from 43 countries, besides resource persons, and representatives from the Indigenous Peoples of Africa Co-ordinating Committee (IPACC). The Asia-Pacific workshop was the second in the series, hosted in India during 12-15 October, with 25 country representatives (14 from the Pacific region), besides participants from indigenous and local communities (Indigenous Peoples Pact Foundation, Partners of Community Organizations, Mountain Institute). The Latin American and Caribbean workshop was held in Columbia during 2-5 November 2009, with 23 country participants (14 from Latin America and nine from the Caribbean) and representatives from the indigenous and local communities in the region. It was interesting to note that the three workshops were largely focused on terrestrial protected areas, except for the Pacific countries in the Asia-Pacific meeting, who had more experience of MPAs. Resource persons for all three workshops were from The Nature Conservancy (TNC), United Nations Development Programme-Global Environment Facility (UNDP-GEF), World Wide Fund for Nature (WWF), World Conservation Society (WCS), and the World Conservation Union (IUCN) Theme on Indigenous and Local Communities, Equity and Protected Areas (TILCEPA).

The workshops clearly showed that there was lack of awareness among government representatives about

key issues in the PoWPA, especially on the critical issue of governance. There was very little understanding of the IUCN typologies of governance used commonly within protected area work, which makes the important distinction between community conserved areas and 'co-managed' areas. At the African workshop, an interesting example of an MPA in Casamance, Senegal, was presented, where the Kawawana, Mangagoulak rural community has set up a community-declared conserved area, with detailed management plans and zoning developed by the community, integrating traditional and scientific knowledge.

Locally managed marine areas (LMMAs), special managed areas, and legally recognized traditional closed areas set up in several Pacific countries were explained during the Asia workshop, especially where the community has been involved in setting up, managing and monitoring MPAs. In the Latin American workshop, some of the successful examples presented included the PNN Galapagos, where there are quotas for the private, fishery and tourism industries, with specific agreement with the Cuyabeno indigenous people who have mangrove concessions; and the creation of the whale sanctuary in Chile, at the initiative of Chilean artisanal fishers and conservation

JACKIE SUNDE



Delegates at the Africa Regional Meeting in Cote d'Ivoire on the CBD Programme of Work. 43 countries were represented at the meet

NGOs, to control the expansion of industrial fisheries and aquaculture.

Few officials have been exposed to the perspective of a 'human-rights-based approach' to protected area planning and management. This was clearly highlighted by the lack of awareness among government representatives about the link between implementation of international human-rights commitments and the implementation of the PoWPA. Several government representatives were not aware of the United Nations Declaration on the Rights of Indigenous Peoples or of the broader human-rights instruments that contain references to participation in decisionmaking, and how relevant these are for setting up protected areas and their management. Often participation was relegated to either stakeholder forums or general consultation, not recognizing forms of participation where indigenous and local communities are actively involved in decision-making bodies as 'rights holders'. Government representatives were not aware of problems and issues in implementing MPAs, especially from a fishing-community perspective.

States have focused on increasing the number of protected areas to achieve the 10 per cent target set by the PoWPA, but have neglected many of the more qualitative outcomes.

One of the key omissions highlighted by the ICSF representative at the African workshop was the lack of mention of gender issues in protected area management and governance, which has particular relevance in areas where local and customary governance practices often discriminate against women. Women's rights are seldom taken into consideration during the setting up of protected areas or in their management, especially in issues relating to decisionmaking and benefit sharing.

At the Latin American workshop, representatives from indigenous and local communities and ICSF stated that many of the management plans

are not compatible with local practices and traditional uses, leading to conflicts and tension. Often, communities do not have access to State health services, and are also banned from using native species for traditional medicine, thus denying them basic human rights. These representatives demanded a more multi-sectoral and multi-cultural approach to protected area processes, including management, where the protected area managers have an understanding of the local culture.

Prior to the workshops, country-level reports had been submitted to the CBD Secretariat, and during the workshop participants were required to complete questionnaires used as a means of further assessing progress towards targets. The report of these workshops prepared by the Secretariat to the SBSTTA (Subsidiary Body on Scientific, Technical and Technological Advice) highlights that of the seven goals in the PoWPA to be achieved by 2008, the progress in two goals—Goal 2.1 (promoting equity and benefit sharing) and Goal 2.2 (enhancing involvement of indigenous and local communities)—is very limited and way behind targets.

States have focused on increasing the number of protected areas to achieve the 10 per cent target set by the PoWPA, but have neglected many of the more qualitative targets. The problems in implementing Programme Element 2 were identified as: inadequate involvement of indigenous and local communities in protected area planning and management; local community resistance to protected areas; and governments not embracing the wide range of governance types in protected area strategies. The document also highlights that very little progress is being made in increasing the coverage of area under MPAs (with only 5.9 per cent of the world's territorial seas and 0.5 per cent of the extra-territorial seas being designated as MPAs).

The key outcome of the Regional Workshops was a set of recommendations to the Fourteenth Meeting of the SBSTTA, to be held in Nairobi, Kenya, from 10 to 21 May

2010, where the implementation of the PoWPA will be assessed in preparation for COP10. Government representatives and national focal points were asked to provide inputs to these recommendations. Representatives from ICSF also contributed to the various working groups. Among the key inputs from ICSF were suggestions to:

- encourage Parties to implement a range of governance types for management of MPAs, recognizing the rights and responsibilities of indigenous and local communities (under MPAs);
- incorporate governance assessments into the management effectiveness evaluation (under Management effectiveness);
- request governments to recognize the non-monetary values of protected areas, and facilitate national assessment of socioeconomic costs and benefits of protected areas;
- include representatives of indigenous and local communities in multi-stakeholder committees, in consultations for national reporting on the PoWPA and national reviews of protected area systems (under Programme Element 2);
- establish and provide guidance on mechanisms and processes for recognition of community conserved areas, collaborative management and diversification of governance types and improved governance quality (under Programme Element 2); and
- establish MPAs in areas beyond national jurisdiction; and recognize the need for clear, equitable benefit sharing, and also recognize the rights of artisanal fishers (especially in the case of Peru and Chile).

Some of the important recommendations to the SBSTTA from these workshops included the following:

- a) provide additional technical support through the development of toolkits, best practices, and guides on themes of the PoWPA, in collaboration with partners, in particular on Element 2 (governance, participation, equity and benefit sharing);
- b) increase awareness of the benefits of the PoWPA to health, water and other sectors, climate change adaptation and mitigation, poverty alleviation and the Millennium Development Goals (MDGs) by holding workshops to bring key actors from these sectors to discuss ways of collaborating to develop mutually beneficial responses to the PoWPA;
- c) support and finance the use of natural ecosystems and, in particular, protected area systems in carbon storage and capture and in ecosystem-based adaptation to climate change, and to embed improved design and management approaches for protected area systems into national strategies and action plans for addressing climate change, including through existing national adaptation programmes of action (NAPAs);
- d) incorporate governance assessments into the management effectiveness evaluation process;
- e) encourage Parties to implement a range of governance types for management of MPAs, noting the United Nations Declaration on the Rights of Indigenous Peoples (General Assembly Resolution 61/295);




Chairperson Jo Mulonguy addressing the CBD Africa Regional Workshop on Protected Areas. The workshop made recommendations to the forthcoming 14th Meeting of the SBSTTA

- f) invite Parties to increase understanding of the role, importance and benefits of protected areas in sustaining local livelihoods, providing ecosystems services, reducing risks from natural disasters, adapting to, and mitigating, climate change, health, water and other sectors, at all levels;
- g) establish a co-ordination mechanism between the PoWPA and other related processes under the CBD, including, *inter alia*, forests, marine, access and benefit-sharing and Article 8(j) working groups and the processes related to the Addis Ababa and Akwe:Kon guidelines for exchange of information on implementation of these programmes and recommendations on possible joint actions for enhanced implementation;
- h) consider the creation of a national indigenous and local community focal point under Article 8 (j), where appropriate, which could liaise with the respective focal points for the PoWPA;
- i) recognize the role of indigenous and community conserved areas in biodiversity conservation, collaborative management and diversification of governance types;
- j) include indigenous and local communities in multi-stakeholder committees, in consultations for national reporting on the PoWPA, and in national reviews of protected area system effectiveness; and
- k) involve the multi-stakeholder co-ordination committees in the reporting process.

The SBSTTA will consider these recommendations, and will make recommendations to COP10, where the implementation of the PoWPA will be reviewed. While there are still a number of obstacles in implementing the PoWPA in its true spirit, it is important that countries recognize the potential role of governance in protected area processes and

understand the links between human-rights commitments and the PoWPA.

With the increasing attention being paid by some countries to viewing protected areas as climate change mitigation and adaptation opportunities, it is essential that countries focus not only on the quantitative targets of the PoWPA but also the quality and actual benefits from protected areas (governance, and contribution of PAs towards livelihoods), where the rights and responsibilities of indigenous and local communities are recognized.

It remains to be seen whether or not the growing interest in protected areas as a strategy for contributing towards climate change mitigation and adaptation will create space for indigenous and local communities living in, and adjacent to, MPAs to articulate the local knowledges that they possess, highlight the roles they have played in protecting marine ecosystems, and claim their rights to participate fully and effectively in the governance of these areas. 

For more



www.cbd.int/protected/needs.shtml

CBD's Programme of Work on Protected Areas

mpa.icsf.net

ICSF's MPA Subsite

www.mpanews.org

MPA News

The Hearts of Fishers

***Men on the Edge*, a 90-minute film made in 2005 by Avner Faingulernt and Macabit Abramzon of Israel, tells of how, against all odds, Israeli and Palestinian fishermen co-existed**

The title of the film, *Men on the Edge: Fishermen's Diary*, may be interpreted as dealing with fishermen aboard a vessel—or it could be seen to refer to men about to see the end—or the edge—of a world. In this documentary lasting 90 minutes and four years in the making, the two film-makers, Avner Faingulernt and Macabit Abramzon, bring us face-to-face with fishermen who seem to come out of the Bible. It is a trip to the heart of small-scale fishing in the part of the Mediterranean on the border between Gaza and Israel. It is equally a trip into men's hearts.

Following the Oslo Agreements of 1993, Palestinian fishermen have the right to fish in the 20-mile zone off their coast. In reality, though, the Israeli army bans fishing beyond seven miles. In 2008, the Israeli navy targetted fishing boats with foreign militants aboard. In 2009, the zone was reduced to three miles, making it impossible to fish.

In 1999, the year when the documentary began, another state of mind prevailed on small Palestinian boats. A friendly atmosphere reigned on the beach, which seems unrealistic today to spectators used to seeing stark opposition between Palestinians and Israelis. Then, the fishermen met together, sitting at a table, close to a fire, surrounded by dilapidated shacks. They are seen joking while waiting to go out to sea, and then embracing each other goodbye. This world, which is far removed from the stereotypical representations of the Israeli-Palestinian relationship, is set against a background of checkpoints, Israeli warboats, and a television that

keeps broadcasting images of a country where violence seems to be the rule.

Our fishermen, seated on barrels and plastic chairs, are not really part of this world. Here, the Palestinians are the bosses. Under their orders, the Jewish Israelis are learning the job... provided that their Palestinians friends are allowed to pass the border. At first, these men, who share the same way of life, respect one another and accept mockery. They live inside tumbledown shacks, and spend their time on the shore. Very few women appear in the film, only on the television screen, or when an Israeli fisherman evokes his

It is a trip to the heart of small-scale fishing in the part of the Mediterranean on the border between Gaza and Israel.

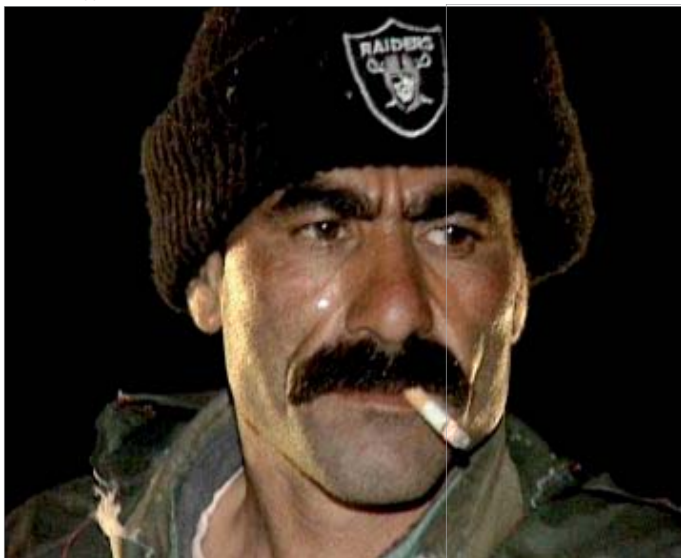
ex-wife. Apart from smoking the *narghileh* or drinking tea, these fishermen seem to spend most of the time chatting away about the job, about the war, about God.

Real complementarity

They mainly fish sardines on their small boats. With much skill and passion, the Palestinians also fish amidst the waves by throwing out cast nets. Whenever the Palestinian boatowners are absent, blocked at the border when troubles get more serious, the Israelis are much less efficient in their fishing. At sea, there is real complementarity between them, and on land, real complicity.

*This review, by **Pierre Rio** (pierre.rio@gmail.com), is translated by **Danielle Le Sann***

AVNER FAINGULERNT



A scene from the film *Men on the Edge: Fishermen's Diary*. Jews and Palestinians have succeeded in creating a fragile brotherhood

The Sa'adalla family commands the boats on Sikma beach. At sea, they sing their own sailor songs for hauling in the nets by hand. On the beach, an Israeli fisherman breaks into a song, that of soldiers who fought in Lebanon.

Exchange is possible. Difficulties appear when the Israeli government bans fishing at night. More and more incidents take place with the Israeli navy; that affects everybody's morale. Whenever an ultramodern warship comes upon a small Palestinian fishing boat, the discrepancy is obvious. We cannot see the members of the crew of the warship, for it is too high from the point of view of the small fishing boat. Nevertheless, a voice can be heard, coming as it were from the hull, reminding the Palestinians that they are under control; this makes the difference between the boats even more striking. The spectator wonders whether it is because of the presence of the camera that the military leaves after a quick check. It is as though man faced up to the machine.

Another interesting thing about the film is that we discover many-sided aspects of fishing. Hauling in the nets, cutting up *calamar* (squid) and other fishes ...all the ancestral gestures that mark the working day. Sometimes, children can be seen. One of them, who apparently refused going to school, according to his father, happens to be at sea.

During the four years that it took to make the film, we witness the degradation of the relationship between Jews and Palestinians: *Intifada* and suicide bombings worsen it. The political change is felt in the relationships among the members

of the crew, which take a tragic turn when the wife of a Jewish fisherman is killed in a suicide bombing. Despite the political events, Jews and Palestinians have succeeded in creating a fragile brotherhood while fishing along the coast. Palestinian captains and Israeli fishermen share a lot, while fishing or living on board the same boats.

Four years later, in the summer of 2003, when the film-makers returned, all the Palestinian fishermen had gone away, or rather were denied the right to come to the beach. There was no fishing activity anymore, because the Israeli fishermen couldn't manage to do it alone. At the beginning of the film, the men were talking and having tea together; near the end, a tank is driving along the beach. The fishing boats are stranded, and the small boats are collapsing. This world is coming to an end. The Israelis are left alone, regretting the demise of the good old days.

This film, which is in Arabic and Hebrew with English subtitles, is like a theatrical drama played out before the camera, on a beach. In it, we discover an environment that is new to us, difficult to imagine; yet, it is full of hope, showing that brotherhood can develop among people of the two communities along the Mediterranean coast.

For more

www.pem.org/press/press_release/29-human_rights_watch_international_film_festival_opens_at_pem

Film Description from Peabody Essex Museum

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Small but Nutritious

Small indigenous freshwater fish species can help meet the nutritional needs of the rural poor in developing countries, as a recent ICSF workshop noted

In much of the developing world, the rural poor have traditionally depended on various varieties of small indigenous freshwater fish species (SIFFS) to meet their nutritional needs. SIFFS—defined as those fish species that grow to a maximum length of 25 cm—are easily available and accessible from nearby water bodies. In India, for instance, they contribute to a significant share of the freshwater fish production in the eastern and northeastern States. Yet they have received insufficient attention in inland water fisheries policies and programmes, both at the national and State levels.

To address this anomaly, the International Collective in Support of Fishworkers (ICSF) Trust, in collaboration with the Inland Fisheries Society of India (IFSI), organized a national workshop titled “Small Indigenous Species of Freshwater Fish: Their Role in Poverty Alleviation, Food Security and Conservation of Biodiversity”, during 23-25 February 2010 at the Central Inland Fisheries Research Institute (CIFRI), Kolkata, West Bengal.

The workshop was meant to be a forum for people working in freshwater fisheries and aquaculture to exchange views on the role of SIFFS in enhancing rural food and livelihood security and in conserving biodiversity. It was also meant to discuss the socioeconomic and cultural context for culture and capture of SIFFS with a view to enhancing access, especially of women, to better income, livelihood and nutritional security, and to propose policy spaces for sustainable SIFFS.

The workshop was attended by 58 participants, including scientists, researchers, policymakers, fish farmers, members of civil society and representatives of multilateral agencies.

In her introductory speech, Chandrika Sharma, Executive Secretary, ICSF, highlighted the importance of SIFFS as a unique source of nutrition, especially for the disadvantaged populations in the eastern and northeastern States of India. She pointed to the need for retaining and strengthening access of discriminated groups, particularly

Considered as trash fish until the 1980s, SIFFS are slowly being recognized as highly valuable from economic, livelihood, nutritional and environmental perspectives.

women, to such species, both for nutrition and livelihoods. Pointing out that the workshop was the result of extensive collaboration, Chandrika Sharma concluded by thanking all who were instrumental in making it possible.

Contemporary relevance

A. P. Sharma, Director, CIFRI, and President, IFSI, pointed to the contemporary relevance of the workshop. Considered as trash fish until the 1980s, SIFFS are slowly being recognized as highly valuable from economic, livelihood, nutritional and environmental perspectives. Studies by CIFRI indicate that traditional fishers of

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river basins depend, to a large extent, on fishing of SIFFS for their daily earnings, especially during lean seasons and fishing holidays. No amount of progress in the aquaculture of large and fast-growing fish and prawn can replace the utility, free accessibility and benefits of SIFFS. Debates at the workshop should pave the way for strong policy guidelines for the

conservation and rational exploitation of these species, he concluded.

P. Das, former Director, National Bureau of Fish Genetic Resources (NBFGRR), highlighted the need for a culture protocol for SIFFS and wider adoption of these species in aquaculture.

In his keynote address, V. V. Sugunan, the Assistant Director-

The Barrackpore Declaration

We, scientists, researchers, policymakers, fish farmers and members of civil society, having participated in the workshop on "Small Indigenous Freshwater Fish Species: Their Role in Poverty Alleviation, Food Security and Conservation of Biodiversity", organized jointly by the International Collective in Support of Fishworkers (ICSF) and the Inland Fisheries Society of India (IFSI), from 23 to 25 February, 2010 at the Central Inland Fisheries Research Institute (CIFRI), Barrackpore, Kolkata;

Being aware that the 61st Session of the United Nations General Assembly has declared 2010 as the International Year of Biodiversity;

Recognizing the importance of conserving biodiversity of small indigenous freshwater fish species in the context of climate change, sustainable development and aquatic biodiversity;

Taking note of the significant but invisible contribution of small indigenous freshwater fish species to culture and capture fishery production in India;

Being aware of the importance of small indigenous freshwater fish species as an affordable source of nutrition, particularly of micronutrients, to the rural poor;

Taking note of research and good practices in relation to small indigenous freshwater fish species, aquatic biodiversity and poverty alleviation, by national and international agencies;

Recommend the Department of Animal Husbandry and Dairying and Indian Council of Agricultural Research, Ministry of Agriculture, Government of India; Ministry of Environment and Forests, Government of India; State fisheries ministries and departments, and State environment and forest ministries and departments, civil society organizations and other relevant and interested parties to:

Conserve small indigenous freshwater fish species by protecting their natural habitat;

Promote sustainable use of small indigenous freshwater fish species in both capture and culture fishery systems for enhancing nutritional security of the rural poor, providing greater employment opportunities;

Actively examine the feasibility of incorporating small indigenous freshwater fish species into existing polyculture practices through research, development and extension programmes;

Target studies on contribution of small indigenous freshwater fish species from different aquatic resources and farming systems;

Evaluate the role of small indigenous freshwater fish species in nutritional security of vulnerable groups, such as pregnant and lactating women and children;

Ensure that policy and legislation at different levels on capture fisheries, aquaculture and biodiversity conservation addresses the development needs and conservation requirements of small indigenous freshwater fish species;

Protect access rights of local communities, especially women, to small indigenous freshwater fish species, particularly through appropriate policies and legislation that take into consideration the local socioeconomic, cultural and institutional context; and

Document and protect traditional knowledge and farmers' innovation with regard to use of small indigenous freshwater fish species resources.

General, Indian Council of Agricultural Research (ICAR), said that SIFFS are relevant in the context of diversification of species in aquaculture. He added that estimates of the contribution of fish to the country's gross domestic product (GDP) are off the mark, due to poor valuation techniques. The importance of fish as a source of nutrition for the poor should be recognized since variously priced fish are available for different income groups. Sugunan also emphasized the need for an enabling policy environment, proper governance and a co-management platform.

In his presidential address, G. Mohan Kumar, Principal Secretary, Fisheries and Animal Resources Development Department, Government of Orissa, stressed the need for policy packages to protect SIFFS, considering their nutritional significance for the rural poor.

The presentation on nutrition highlighted the importance of SIFFS as a source of micronutrients, vitamins and fatty acids. SIFFS offers a better bioavailability of calcium than milk and could thus be a good dietary supplement for expectant and lactating mothers. SIFFS' bioavailability can be improved with more attention to cleaning and cooking practices. Even a minimal production of 10 kg per pond per year of *mola* (*Amblypharyngodon mola*) can make a large difference to the nutritional needs of the rural poor, it was pointed out.

Mola is a self-recruiting species, and perennial ponds can produce enough seeds. Experiments in Bangladesh have proved that a flow-through circulation system would facilitate continuous production and harvest of *mola* in polyculture. Improving habitat itself will enhance the production of SIFFS. Therefore, it is all the more important to raise awareness about the dangers of using piscicides (chemical substances that are poisonous to fish) in ponds. The Bangladesh government, it was pointed out, has issued an order that forbids the use of poisons for cleaning ponds prior to the introduction of scientific aquaculture.

India has around 450 species of SIFFS, of which 62 are highly important



The workshop was attended by 58 participants, including scientists, policymakers, fish farmers, members of civil society and representatives of multilateral agencies

as food species and another 42 species as food and ornamental fish. Nonetheless, despite this diversity, SIFFS are invisible in official statistics, it was pointed out. There is a need to develop a legislative framework, as well as criteria, for the conservation of SIFFS in the larger context of biodiversity and inland fisheries conservation, keeping in mind the need to ensure local food security.

The importance of fish as a source of nutrition for the poor should be recognized since variously priced fish are available for different income groups.

SIFFS, however, should not be allowed to feed the fishmeal industry, it was cautioned.

The workshop session on livelihood emphasized the contribution of SIFFS from river systems. There is significant demand for SIFFS in the eastern and northeastern States of India. Unlike in the case of Indian major carps, SIFFS contribute a greater share of the consumer rupee to the fisher. A shift in focus from promoting the culture of exotic fish to culturing commonly consumed fishes such as SIFFS and other indigenous varieties is greatly needed. Polyculture of SIFFS and carps

need not have a negative impact on carp production, it was noted.

During the session on capture fisheries, Mohan Kumar said that the feasibility of SIFFS in the State of Orissa, where two-thirds of the population were below poverty line and are dependent on fish as the principal source of animal protein will be looked into. It was suggested that the Central Institute of Freshwater Aquaculture (CIFA) and CIFRI should undertake assessment of the economic and nutritional value of different species of SIFFS.

In the northeastern States of India, there is no concept of 'trash fish', and all non-poisonous fish, especially SIFFS, have a ready market and fetch high prices, ranging from Rs300 to Rs600 (US\$7-14) per kg.

Traditional community fishing has been sustained by SIFFS, which are available all year round, and provide income to fishers dependent on wetlands.

The workshop session on culture fisheries focused on the 'aquaplosion' (the vertical and horizontal expansion in aquaculture) happening in India. The possibilities of including SIFFS, now largely ignored, in culture

yield good farmgate prices through the year, and are a ready source of essential nutrition for the family.

Any threat to biodiversity and the ecosystem is a threat to SIFFS and *vice versa*, it was pointed out. The lack of policy on maintaining rivers and the environment—and the resulting pollution—has largely contributed to the decline in biodiversity of SIFFS. Current licensing and leasing rules lack coherence, and are largely focused on raising revenue. Due to exorbitant lease fees, common-property water resources are increasingly getting shifted into the hands of private lease holders, to the detriment of fishers.

The first right of access to inland water bodies should be reserved for co-operatives of traditional fishers, as in Madhya Pradesh, it was suggested. Improved collection and collation of baseline data on inland fishery resources production and consumption was sought by the participants.

The last session of the workshop on community knowledge and intellectual property rights focused on the objectives of promoting SIFFS—nutritional security (especially for women), livelihood security, conservation of biodiversity, or a combination of all three. It was suggested that the Honey Bee network be requested to document innovations and traditional knowledge regarding native fish species, while the ICAR network could focus on the nutritional profile of these species. A State-wise list of endemic and endangered SIFFS was sought.

The potential for culture of these species should be evaluated, considering their nutritional and therapeutic value. Technology for polyculture using SIFFS should be developed only after careful thought, it was suggested. Unless a package of practices is offered, farmers may not be interested in culture of SIFFS.

Best practices

The best practices of farmers need to be employed to promote integration of SIFFS into composite aquaculture or polyculture systems. Rather than opting for a readymade package of

The first right of access to inland water bodies should be reserved for co-operatives of traditional fishers...

fisheries need to be considered. CIFA was requested to develop a package for fish farmers for culture of SIFFS. Such schemes could be implemented under the Rashtriya Krishi Vikas Yojana (RKVY), and under the National Rural Employment Guarantee Scheme (NREGS).

During the session on policy and social dimensions, it was pointed out that large farmers, guided mostly by the extension services provided by the fisheries departments, are largely disinclined to include SIFFS in culture unless they are proved profitable. Small farmers with homestead ponds prefer to rear SIFFS, which, according to them,

practices, the focus should be on promoting SIFFS by incrementally improving existing practices, said one of the participants. To view aquafarmers as only being interested in income is regressive, it was opined.

Group Discussions: The group discussions focused on three themes: biodiversity, poverty alleviation and nutrition. The groups discussed and suggested policy interventions that could better integrate SIFFS into different perspectives.

The nutrition group suggested studies on intra-household consumption of fish, prioritizing species to be cultured in consultation with stakeholders; and popularizing the consumption of nutrient-dense fish species through awareness programmes. Ensuring access rights of local communities to SIFFS was also emphasized.

The poverty alleviation group called for recognition of SIFFS' role in poverty alleviation; assessing their contribution to the economy and nutrition of disadvantaged populations, particularly women and children; ensuring protection and management of aquatic habitats, while securing the access rights of disadvantaged groups to aquatic resources; promoting SIFFS in culture-based fisheries and aquaculture systems through research and policymaking; and strengthening appropriate community institutions to protect access rights, and to ensure responsible ecosystem management and equitable economic benefits.

The biodiversity group recommended assessment of freshwater habitats, species richness, endemism and the causes of environmental degradation. This would help develop priorities for SIFFS conservation. Existing policies should be reviewed for their adequacy and shortcomings, and community awareness should be developed. Management models and recovery programmes should be developed with the participation of local communities, it was suggested.

The group also drew attention to the lack of recognition of wetlands as a multiple-use system. It stressed the need to find a balance between

conservation measures and livelihood and nutrition needs. Traditional knowledge and practices ought to be recognized and rewarded; and wetland commons should be protected from being taken over by powerful interests. The group also pointed to

Conservation of SIFFS in open water bodies needs to be prioritized as a way of addressing starvation, food insecurity and poverty alleviation.

the lack of representation of fishery interests in the various bodies governing wetland habitats.

The session on "The Way Forward: Integrating Small Indigenous Freshwater Fish Species into Fisheries and Aquaculture Development Policies and Programmes" had inputs from various State governments. The Department of Fisheries, West Bengal, expressed interest in a thorough study of the breeding biology of SIFFS and in profiling their nutritional value, stressing the need for collaboration between different agencies. Conservation of SIFFS in open water bodies needs to be prioritized as a way of addressing starvation, food insecurity and poverty alleviation. There is need to consider the introduction of SIFFS in paddy fields and open water bodies. People for whom policies are made should be involved in these processes, it was noted.

At the end of the workshop, a declaration was finalized based on inputs from all the participants. In his concluding remarks, A. P. Sharma, Director, CIFRI, pointed out that it was for the first time that the issue of SIFFS was being highlighted in India. He hoped that such workshops will help generate different ways of thinking about how India can meet some of the Millennium Development Goals by 2015, namely, enhancing food security, raising nutritional security, and halving poverty.

For more



[www.eeap.cipotato.org/UPWARD/Publications/Agrobiodiversity/pages%20439-447%20\(Paper%2055\).pdf](http://www.eeap.cipotato.org/UPWARD/Publications/Agrobiodiversity/pages%20439-447%20(Paper%2055).pdf)

Conserving Fish Biodiversity in Sundarbans Villages in India

fish-and-nutrition.net

The Role of Fish in Food and Nutrition Security in Developing Countries

www.fao.org/fileadmin/templates/biodiversity/pdf/Halwart.pdf

Biodiversity: Journal of Life on Earth

Successful Experiment?

Chile's experience with territorial use rights in fisheries shows their potential for the management of coastal resources, provided some simple safeguards are put in place

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The partition of coastal fishing grounds into territories has been common practice among communities of fishers and gatherers as an instrument to assign access privileges, rotate harvests or protect areas significant for the conservation of valuable resources. Rules granting individuals or communities exclusive access to fishing grounds have been in place since pre-historic times in the form of traditional marine tenure systems, revealed to scientists during the 1970s through the works of the late Bob Johannes and others. The notion was crystallized in 1982 in the acronym TURF (territorial use rights in fisheries) by F. T. Christy Jr., a consultant to the Food and Agriculture Organization of the United Nations (FAO).

stocks of bottom-dwelling (benthic) shellfish stocks.

Paradoxically, while many traditional tenure systems have been eroded by the application of policies shaped after the industrial fishing experience, managers from Western countries are showing appreciation for the possible merits of TURFs. Contrary to the gradual, bottom-up, long-term evolution of TURFs within traditional tenure systems, however, some TURF systems have been introduced in recent years top-down, through innovative legislation or policies crafted by agency managers. Prominent examples include the abalone fishery of South Africa and the benthic fisheries of Chile. In these and other cases, innovative management was prompted by the failure of conventional quota-based management leading to notorious fishery collapses, and the subsequent urgencies imposed by economic crises and social unrest. We had the opportunity to be outside observers of the Chilean TURF system since the beginnings of its implementation, through collaboration with fishermen's organizations, managers and scientists.

...innovative management was prompted by the failure of conventional quota-based management leading to notorious fishery collapses...

TURFs have attracted widespread attention in recent years in the context of 'rights-based' fisheries management. The latter is often predicated as the most natural solution to the tragedy of the commons which has been singled out as the main culprit of overfishing and fishery collapses. Besides territories, user rights or privileges can involve a portion of the catch (the case of individual transferable quotas) or a fraction of effort units (for example, lobster traps). Within this broad family, TURFs are most suited to the case of sedentary resources, for example, most

Urban areas

Chilean benthic fisheries involve commercial diving, traps and gathering of algae and molluscs in the intertidal zone. Artisanal fishers are integrated in communities known as *caletas*. In rural areas *caletas* resemble the fishing villages of other parts of the world, while they tend to be less well defined in urban areas. *Caletas* conform to the social, ecological and economic template of Chilean artisanal fisheries.

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Most fishers from a *caleta* are members of one or more local organizations, generically known as 'syndicates', which, incidentally, are by no means equivalent to the homonymous labour movement organizations of industrial countries. Syndicates are grouped into regional federations, and federations into two major national confederations. The resources targeted by commercial divers are generally valuable; some of them fuel major export-oriented fisheries. For instance, Chilean divers account for around 80 per cent of the world's supply of sea-urchin roe.

The most significant among benthic resources is *loco* (*Concholepas concholepas*), a pricey snail vaguely and superficially resembling abalone. Before the mid-1970s, *loco* was consumed only domestically; annual landings were in the order of 5,000 tonnes. Exports boomed after the product was introduced to Japan in 1976, and landings climbed to around 25,000 tonnes while the fishery was regulated with a legal size and fishing seasons under an open-access regime. In 1989, sensing symptoms of overfishing, managers closed the fishery for three-and-a-half years. This draconian measure did not stop fishing: effective enforcement is illusory in a fishery operated by small boats spread along a coastline that spans 38 degrees of latitude. The main result of the closure was the marginalization of the fishers because of the development of a flourishing black market.

Meanwhile, political tensions and social unrest grew. In 1991 the then president of the country, Patricio Aylwin, and members of his cabinet visited the region of Los Vilos (Region V, see map), the cradle and hub of commercial diving. Artisanal fishermen were cutting roads and burning tyres. In an audacious move, Oscar Avilez, leader of the regional federation of artisanal fishers, interrupted into a meeting that the president was having with regional authorities. People waiting outside expected Oscar to be detained by the presidential authorities. Instead, he was embraced by President Aylwin, who immediately instructed the

Undersecretary of Fisheries to consider evidence of recovery assembled by fishermen with assistance from some biologists. In the end, the ban was lifted and the fisheries authority introduced a new management regime: individual non-transferable quotas assigned to registered commercial divers. Five

The resources targeted by commercial divers are generally valuable; some of them fuel major export-oriented fisheries.

years later, the catch per unit effort (CPUE) had returned to the very low level that preceded the closure due to ineffective enforcement and illegal trading of *locos* and tickets.

Years earlier, before and during the closure, some fishermen had been experimenting with innovative practices, in some cases in collaboration with academics, most notably Professor Juan C. Castilla and his co-workers at the Catholic University of Santiago. *Loco* recovered rapidly within areas where fishermen voluntarily agreed to stop fishing. These experiences paved the way for the inclusion in a new fisheries act, passed by Congress in 1992, of a particular form of TURF, locally known by the acronym of AMERBs (after the Spanish for 'areas for the management and exploitation of benthic resources'). Elaboration of the interpretive document of the law (the *Reglamento*) was a protracted process that involved a lengthy debate among fishermen, managers, scientists and politicians. The implementation process started in 1997, and by 2000, *loco* could be legally

ORENSANZ AND PARMA



Map of Chile showing the country's 15 administrative regions with coastline. Regions IV and V are the cradle of the TURF system

Excerpts from an interview with Oscar Avilez, leader of the regional federation of artisanal fishers

On why he was forced to gatecrash a meeting of President Patricio Aylwin:

For a simple reason: the scientific community and the fisheries authorities did not trust the fishermen. But we had results to show, which were backed by data, statistics and planning. Though the authorities knew that, the president was not informed. When he heard us out and listened to our proposal, he believed us, and ordered the lifting of the closure of the loco fishery.

On whether the artisanal fishers' grievances were met after the introduction of territorial use rights in fisheries:

This has been a test. Many organizations were strengthened and stayed within the system. Others have not been able to solve their problems: they were born weak, and did not survive the crisis. You need strong organizations.

On the relevance of such regimes now:

In my opinion, the (AMERB) system has not yet got institutionalized. It is a good management measure, but you need leadership.

On outstanding issues:

First, it is necessary to acknowledge that it is important to take care of the resources, and exploit them rationally. Second, the authorities must follow technical advice rather than populist policies.

On the pros and cons of implementing a territorial rights regime through fishers' organizations:

On the plus side are the plentiful natural resources, and the solid organization of fishers' groups. The latter are needed to implement models that serve both resources and communities. On the downside is the indolence of organizations which have a culture of subsidy dependence. This is damaging because it curtails the independence of the organizations, limiting their capacity to solve problems through their own ideas. Organizations must be self-sufficient.

On the future of small-scale fishing for both sedentary and mobile species:

It must be shown that we have an established capacity to reverse the undesired effects in fisheries, and to overcome systems that are imposed top-down and are often wrong. This is needed if our activities are to survive and improve in the future. We must develop capacities related to our activities.

There is another issue that I would like to address: environmental quality. Specifically, we oppose the installation of thermoelectric plants in the neighbourhood of our fishing grounds and management areas. This is particularly problematic in the case of La Higuera, our commune. A marine reserve, unique for the diversity of its marine life, is under threat. So too is the subsistence of several fishing communities in the region.

harvested only within AMERBs. By 2007, 732 tracts had been designated for AMERBs, of which 237 had an approved management plan that included *loco* as a target resource. Functioning AMERBs involved 14,324 registered fishers.

AMERBs are granted to fishers' organizations, not to fishing communities. Each AMERB consists of a tract of seabed where members of the organization have exclusive fishing privileges over resources declared as target. In order to get and keep those privileges, they must conduct a detailed baseline study, as well as annual surveys of the target resources (for example, *loco*). Studies are contracted with consultants that report to the administration; fishermen do not have a protagonist role in assessment, management and setting of objectives. The implementation process, particularly the protocol for requesting

an AMERB, was largely conceived by scientists with an ecological background, which transpires into the nature of the information required. The cost of the studies is high, but until recently was paid mostly with subsidies of various forms. Once an AMERB is granted, the fisheries administration does not keep track of the membership of the organization, or of the way in which costs and profits are split among members. AMERB-holding organizations pay a tax per unit area, which is the same irrespective of the resource targeted, the region of the country, or the productivity of the grounds. Privileges are granted for periods of four years, can be cancelled by the authority if the organization does not comply with the regulations, and are indefinitely renewable. Management plans are negotiated individually for each AMERB by the

organization and the centralized fisheries authority. There is no regional co-ordination, and no formal mechanism for the periodical review and adjustment of the system.

The inception of the AMERBs was a desperate move to address the most pressing problems that had led to recurrent crises in the *loco* fishery: unenforceability of regulations and lack of control of harvest rates. Having been granted secure and exclusive access to tracts of seabed, territorial use privileges gave fishers the incentives to protect their resources, at least in principle. *Loco* abundance recovered within the AMERBs. An important side effect of the AMERBs was the strengthening of the syndicates, because activities related with the AMERBs require significant collective action. Organized fishermen self-impose strict regulations and severe penalties for transgressors, contribute to the sustenance of widows and elderly or ill fishermen, and co-ordinate among themselves for vigilance. Sales of *loco* from AMERBs are arranged before the harvest, which, in principle, gives fishermen the opportunity for better deals. True, prices vary, but markets, not AMERBs, are to be blamed for the downs. Besides, fishermen get access to credit, as banks take as collateral the *loco* stocked in the AMERBs, as appraised by the consultants. Politicians, managers, most scientists, many leaders of fishermen's organizations, the press and the public have, on balance, a positive perception of the system. Managers can show an orderly fishery which yields a product of comparatively good quality. Leaders of fishermen's organizations have been in a good position to attract subsidies from government and non-governmental organizations (NGOs), and fishing has gained a secure place in a coast increasingly subject to alternative uses. Consultants do business, and scientists see the opportunity to test paradigms of fisheries management, like the merits (or lack of them) of rights-based options.

So, is the Chilean AMERB system a success story? The answer is: it depends on whom you talk to. Success is a relative notion: it can be gauged only if the objectives are specified. Objectives reflect societal

values, which are multiple and often conflicting: biological sustainability, economic efficiency, social equity, cultural identity, ecological integrity, and so on. The design and regulatory framework of AMERBs emphasized ecological sustainability over other societal goals, for understandable

Politicians, managers, most scientists, many leaders of fishermen's organizations, the press and the public have, on balance, a positive perception of the system.

reasons. In retrospect, it is clear, however, that some potential problems went unforeseen. Some pertain to the management system itself. Due to the fixed territorial tax, organized fishers quickly claimed relatively small areas holding the most productive patches of seabed. The result was a *de facto* dual management system: a legal system inside and an illegal one outside the TURFs. Stocks outside the AMERBs are severely depleted. In some cases, the introduction of AMERBs has jeopardized pre-existent traditional tenure systems, successful even if informal. This was the case of some communities that harvest bull kelp in Region VI using a lottery to regulate access.

Other problems neglected by design pertain to the economics of the AMERBs.

JAVIER RODRIGUES AND REVISTA PUERTO




Landing locos harvested from an AMERB. Fishermen get access to credit from banks which take as collateral the loco stocked in the AMERBs

At least initially, the membership of the many AMERB-holding organizations (which is not effectively regulated) grew to the point where the rent dissipated, weakening the incentives that are the conceptual core of the system. Fishermen's organizations are now aware of the problem, worsened by low international prices, and have introduced strict entry rules. In some cases, this has happened too late. To complicate things, access to credit—in principle a plus—left many fishermen badly indebted; they often choose to overharvest their fishing grounds rather than default on loan repayments to the bank.

Equity is also an issue. When the AMERBs were implemented some fishers managed to be part of the system, while others did not, for various reasons—from lack of information to the feeling that fishers have the right to fish wherever they wish. The issue of exclusion and inclusion has resulted in a number of local conflicts. In Ancud Bay (Region X), for example, hundreds of fishers revolted against the introduction of AMERBs, illustrating the difficulties inherent to the partition of fishing territories when a large number of fishers have historically harvested the same grounds. The conflict was mediated by the Catholic dioceses, and was accompanied by the creation of a local independent confederation ('Confederation of Fishers for Equity'). In the end, an agreement was reached to return some of the designated tracts and to stop allocating new TURFs within the bay.

The initial fascination with the success of the AMERBs, at least as perceived by scientists and managers, led to their widespread application to resources other than *loco*, and in contexts different from the *caletas* of central Chile (Regions IV-VIII). Clearly, AMERBs are not a 'one-size-fits-all' solution for the management of Chilean benthic fisheries. Elinor Ostrom, who won the 2009 Nobel Prize in Economics, closed her keynote address at a meeting in 2004 of the International Association for the Study of Common Property (IASCP) at Oaxaca, asking a large and diverse audience

to repeat with her thrice: "There are no recipes."

Perhaps this, too, is the main lesson to be extracted from the Chilean experience with the implementation of TURFs. Systems of this nature have much potential for the management of coastal resources, but when implemented by design (as opposed to established by tradition), there are some simple safeguards to be considered. First, there has to be a careful analysis of the stakeholders before access privileges are granted. In the Chilean case, there was a 'first-come first-served' policy, which was reasonable in the case of the *caletas* from central Chile but not in other contexts (like Ancud Bay) where there were multiple users of the same fishing grounds, and some user groups were poorly organized and not well informed. Second, it is important to create regular and participatory feedback mechanisms to evaluate and correct the system as it evolves, attending to multiple societal values, learning from experience, and adapting to changing realities. 

For more

fao.org/DOCREP/003/T0507E/T0507E01.htm

Territorial Use Rights in Marine Fisheries: Definitions and Conditions

icsf.net/icsf2006/jspFiles/cedepesca/
Sustainable Fisheries and Livelihoods in Latin America: Consolidating and Securing Artisanal Fishing Access and User Rights

fao.org/fi/oldsite/FCP/en/CHL/profile.htm
FAO Country Profile: Chile

www.subpesca.cl
Chile Subsecretariat of Fisheries

Organizer, Communicator

Harekrishna Debnath (1949 - 2009)

Harekrishna Debnath, who was born on 16 October 1949 and died on 30 December 2009, was not only a brilliant organizer, but also a humane communicator and strategist

The year 2010 commenced on a sad note for the fishworkers of India with the departure of Harekrishna Debnath, the chairperson of the National Fishworkers' Forum (NFF). In 1989, he joined the struggle for the rights of India's coastal communities to "Protect Waters, Protect Life" (the theme of the march organized by NFF along the coast of India). Harekrishna very soon demonstrated his political commitment, analytical acumen and strategic skills in organizing the dispersed and marginalized fishworkers of West Bengal into the Paschim Bengal Matsyajibi Forum.

It was in these initial years that I got to know Harekrishna closely. He took me through the Sunderbans to see the plight of the fishers, and during that trip two things became very obvious: Harekrishna was determined to see that the community of fishworkers should find its rightful place on the development agenda of the State; he was also able to endear himself to the local people who were awaiting a leader to articulate their demands and bring them to the attention of society at large. Harekrishna was able to do that brilliantly, not only through the respect he commanded with the State Fisheries Department but also by building up a support network in the State. As a result, several issues that would have gone unnoticed, like the banning of the age-old winter fishery in Jambudwip or the installation of a nuclear plant at Haripur, which are affecting the fishing community, have been brought to the attention of the nation.

The support Harekrishna garnered was visible in the variety of people from all classes who visited him and wrote about him in the nine months that he battled the cancer that was devouring him. And battle he did, because even towards the very end, when he was short of breath and could hardly speak, he made it clear that the struggle had to continue and for this it was important that all friends should carry the task forward.

As the chairperson of NFF, he had the difficult task of maintaining a national movement of federated members. He handled that too with the skills of a master craftsman,

Harekrishna was determined to see that the community of fishworkers should find its rightful place on the development agenda of the State...

accommodating different perspectives while simultaneously focusing on the national agenda of the movement. The coastal march that he led in 2008, "Save the Coast, Save the Fishers", focused on the impact of global politics on local communities, and highlighted the need to consolidate the base of the fishworkers' movement, which had got eroded over the years. For Harekrishna, these were all huge challenges that needed attention, notwithstanding any fatal disease.

In 1994, Harekrishna addressed a session of the United Nations Fish Stocks Conference, drawing attention to the fate of millions of coastal

*This remembrance is by **Nalini Nayak** (nalini.nayak@gmail.com), Member, ICSF*

An Amicable Leader

Harekrishna Debnath, who was born on 16 October 1949 and died on 30 December 2009, was not only a brilliant organizer, but also a humane communicator and strategist

Harekrishna Debnath was born on 16 October 1949 at Charfasson in the Bhola district of erstwhile East Pakistan, the largest offshore island region of present-day Bangladesh. The son of a school teacher, Harekrishna had a postgraduate degree in physics from the University of Dhaka. He was a student leader of the Awami League, before relocating to India in 1973 where he assiduously worked for the rights of Bangladeshi refugees.

Harekrishna began his association with the Indian fishworkers' movement two decades ago through the National Fishworkers' Forum (NFF) during its coastal march under the theme "Protect Waters, Protect Life". That was the first campaign in India to draw attention to

the degradation of the coastal zone from pollution and habitat degradation.

Throughout his working life, Harekrishna tirelessly fought for the rights of fishing communities. In 1996, as a leader of NFF, he actively campaigned to rescind the joint-venture policy of the Government of India, which liberalized foreign fishing in the Indian exclusive economic zone. He fought against the displacement of traditional fishing communities in the name of industrial development and coastal aquaculture. He also campaigned against the denial of the livelihood rights of traditional fishers in the name of turtle conservation, and wildlife and forest protection. He fought for the humane treatment of fishers in India, Pakistan and Sri Lanka who are jailed for transboundary crossings and fishing in adjacent territorial waters.

The national campaign that Harekrishna led against the draft Coastal

people worldwide who were being marginalized by official development policies. Harekrishna was an orator par excellence, able to mix solid content with the literary sentiment so typical of the Bengali language.

At our last meeting, he embraced me tearfully and said, "I have made several mistakes, but I have given my all to the fishworkers' movement. Now my days are numbered, but the movement has to go on and we need all of you to be with us in the struggle".

Yes, it was painful to see Harekrishna go. He felt he still had so much to say and do. Based on the difficulties he faced in organizing fishers, he felt strongly that the State has a responsibility to help the unorganized sector. Unfortunately, Harekrishna did not put down any of his reflections in writing. That is a loss, for I am sure his accounts would have been a useful historical and literary reflection on fisheries from a community perspective.

Harekrishna dedicated his life to the struggle of marginalized fishworkers.

I can only salute his everlasting commitment. I feel honoured to have known him closely.

Zone Management Notification in 2008 was responsible for its withdrawal by the government. The Notification was opposed by traditional fishing communities, whose campaign subsequently led to consultations with all stakeholders on an appropriate regime for coastal zone management in India.

While active in mobilizing fishing communities to protect their rights to life and livelihood at the national level, Harekrishna was involved, along with Thomas Kocherry, in the formation of the World Forum of Fishworkers and Fish Harvesters in 1997.

Harekrishna was keen to employ the provisions of international legal instruments to benefit traditional, small-scale fishing communities worldwide. In the process, he engaged with the United Nations and its agencies.

Harekrishna upheld a vision of sustainable development of traditional, small-scale fishing communities, a vision that transcended national boundaries.

His concerns extended to the social issues that affect tribal, indigenous and internally displaced peoples and refugees.

Among other things, Harekrishna was a national leader of traditional fishers. He was the Chairperson of NFF when he breathed his last on 30 December 2009. Even after being diagnosed with lung cancer, he worked hard on several issues of concern to fishworkers.

In his demise, Indian fishing communities and other disadvantaged groups have lost not only a brilliant organizer and thinker, but also a communicator and strategist. In Harekrishna's sad demise, the world of small-scale fisheries has lost an amicable leader who could connect ideas, spaces and action, all with a human touch and always for the benefit of all affected parties.

—This tribute is
by Sebastian Mathew (icsf@icsf.net),
Programme Adviser, ICSF

ICSF



Harekrishna Debnath dedicated his life to the struggle of marginalized fishworkers. He believed that the movement in support of fishworkers should go on

For more



www.coastalcampaign.page.tl/Home.htm
Save the Coast, Save the Fishers

ENDANGERED SPECIES

World nations reject ban on bluefin tuna

Governments attending the UN Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) have rejected an EU-backed proposal to ban trade in Atlantic bluefin tuna to give the species time to reproduce.

The European Commission decided in September 2009 to put to member states its proposal to co-sponsor Monaco's attempt to get Atlantic bluefin tuna listed as endangered under the Convention on International Trade in Endangered Species (CITES). The listing would effectively suspend international trade in Atlantic bluefin tuna until stocks are

no longer threatened with extinction.

Spain, Italy, France and Greece, which feature among Europe's largest fishing fleets, initially challenged the plan, saying transition measures were needed for fishermen to adapt to the ban.

Japan, Canada and several Arab League countries rejected the proposal to effectively suspend international trade in Atlantic bluefin tuna until stocks are no longer threatened with extinction.

They argued that the decline of bluefin tuna stocks would be best tackled by regional fisheries management organizations such as the International Commission for

the Conservation of Atlantic Tunas (ICCAT). They also argued that banning trade "would not stop the fishing of the species" anyway.

Only the United States, Norway and Kenya supported the original proposal for an immediate ban. The EU asked for implementation of the trade ban to be delayed until May 2011 to give authorities time to respond to concerns about overfishing. The amendment introduced by the EU and Monaco was defeated, with 20 votes in favour, 68 against and 30 abstentions "in the middle of much confusion about the voting procedures and mixed feelings of satisfaction and frustration

from participants," CITES said in a statement.

The EU executive said it was "disappointed with the outcome" and now looks to the inter-governmental fishery organization responsible for the conservation of tuna (ICCAT) "to take its responsibility to ensure that stocks are managed in a sustainable way".

Environmental organizations immediately condemned the failure, claiming that it sets the species "on a pathway to extinction".

Greenpeace International oceans campaigner Oliver Knowles regretted that the future of the species had been left in the hands of ICCAT, which he referred to as "the very organization responsible for the dire state of bluefin tuna stocks today".

Source: EurActiv.com

<http://www.euractiv.com/en/sustainability/un-rejects-ban-bluefin-tuna-news-355611>

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ORGANIZATIONAL PROFILE

National Fishworkers' Forum (NFF)

The National Fishworkers' Forum (NFF), established in 1978, is a national federation of trade unions and organizations of fishworkers in India. It was formally registered as a trade union in 1985. The formation of NFF was a direct result of fishworkers' struggles along the coast of India during the late 1970s, subsequent to the conflict between the newly introduced mechanized trawlers and the small-scale, traditional and artisanal fishworkers.

The forum has since then continued to represent the grievances and demands of artisanal fishworkers in India, and has grown in strength and influence at the State and national level. The struggle of the fishworkers took off on a national level in 1989 with the Kanyakumari "Protect Waters, Protect Life" march, when fishworkers marched in two streams, one starting from Mumbai and the other

from Kolkata, to converge at Kanyakumari, at the southern tip of India. The fishworkers and their supporters had traversed the coastline, visiting fishing pockets along the way, where local units had rallied for the march, to spread the message of the need to protect fragile aquatic ecosystems, around which the lives of fishworkers pivot.

NFF actively campaigned against the Coastal Management Zone (CMZ) Notification proposed by the Ministry of Environment and Forests, based on the recommendation of the Swaminathan Committee, which was to replace the Coastal Regulation Zone (CRZ) Notification of 1991. The

Macchimar Adhikar Rashtriya

Abhiyan ("Save the Coast, Save the Fishers"), a two-month *yatra* (march), traversed the entire coast of India, from Kutch to Kolkata, mobilizing support for the better implementation of the CRZ Notification, and for scrapping the controversial draft CMZ Notification.

The CMZ notification was finally withdrawn in June 2009.

NFF is currently organizing regional and State-level workshops on the draft Marine Fishing (Regulation and Management) Act for the management of fisheries resources in the exclusive economic zone (EEZ) of India.

NFF is a member of the National Fisheries Development Board (NFDB). NFF is also actively campaigning for a national-level legislation to comply with the International Labour Organization's Work in Fishing Convention 2007.



LABOUR

Bosnia and Herzegovina ratifies the 2007 ILO Fishing Convention

Bosnia and Herzegovina is the first International Labour Organization (ILO) Member State to ratify the Work in Fishing Convention, 2007 (No. 188).

The new Convention, which revises and brings up-to-date in an integrated manner most of the existing ILO fishing instruments, provides a modern and flexible regulatory framework covering large fishing operations but also addressing the concerns of small-scale fishers.

Convention No. 188 will enter into force 12 months after the date on which the ratifications of ten Members, eight of which are coastal States, have been registered with the Director-General.

Source: ILO

FISHERIES STATISTICS

Inland Capture Fisheries in the Asia-Pacific Region

The global inland capture fisheries catch passed 10 mn tonnes for the first time in 2007, with developing countries accounting for more than 94 per cent of the total global inland catches in 2004, and almost 91 per cent in 2006. China is the largest producer, followed by Bangladesh and India, with their combined production accounting for more than 40 per cent of the total reported global production.

Inland capture fisheries in the Asia-Pacific region are, undoubtedly, among the most important fisheries of the world and are feeding and employing millions of people in rural and riparian areas throughout eastern, southeastern and southern Asia. The massive, dispersed nature of many inland fisheries activities has challenged systems of information and data collection ever since as early as the 1700s.

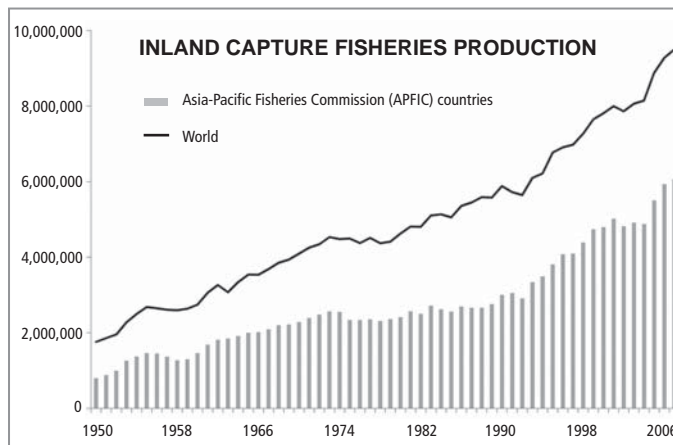
From the reported data, there is an apparent increasing trend in the production of global and regional inland fisheries during the period 1950-2007. However, it is not clear, when viewing aggregated statistics, whether this is due to an aggregated increase in production from all

countries' inland fisheries, or due to large, occasional increases from individual countries. Moreover, there are many instances of unreported (or under-reported) catch in inland fisheries owing to the diffuse and small-scale nature of individual fisheries. But it is becoming less accepted that inland fisheries can continue to increase their yield or sustain yields in the face

of mounting fishing pressure, as there is a trend to fish down the fish assemblage and drive the fishery towards smaller, faster-recruiting species that feed at lower trophic levels.

There could be a number of reasons for reports of increase in fish production. The stocking or enhancement of inland fisheries can significantly increase their productivity, leading to reports of increasing production. Some of the highly managed culture-based fisheries are also often reported as capture fisheries, while these should be reported as aquaculture.

not be valued highly and, as a consequence, little effort and resources have been allocated to information gathering in, and management of, inland fisheries. Often, the occasional fishing catches and catches from recreational fishing are not included in the statistics. Most often catches classified as "freshwater fishes not elsewhere included" exceeded 50 per cent of the global catch, as seen in 2006, and 74 per cent in the case of Asia and the Pacific region. Thus, it is important to understand the various complex drivers and country- and fishery-specific contexts behind the inland capture fisheries production, while keeping in mind that this sector contributes a great extent towards livelihood and food security. Hence, it is important to take a holistic view of inland fisheries management (that is, ecosystem approaches).



of mounting fishing pressure, as there is a trend to fish down the fish assemblage and drive the fishery towards smaller, faster-recruiting species that feed at lower trophic levels.

The multi-stakeholder issues surrounding freshwater use (for power, irrigation, domestic consumption, leisure) also mean that fisheries services may

Source: *An Analysis of Historical National Reports of Inland Capture Fishery Statistics in the Asia-Pacific Region (1950-2007)* by David Lymer and Simon Funge-Smith. FAO. RAP PUBLICATION 2009/18

NOTICE

Women Fish Vendors in India: An Information Booklet

Women fishworkers in India play critical roles in fisheries and fishing communities, which are not recognized or supported. Women are particularly active in post-harvest fisheries. They contribute in significant ways to the food security needs of a diverse range of consumers. What are the problems women fish vendors face on a regular basis? How have women organized themselves to deal with these problems? What are some of the initiatives, governmental and non-governmental, that have been taken to support women fishworkers? What are the various policy spaces available that women can use to seek greater recognition of their work and their livelihoods within the fisheries? These are some of the issues that this booklet attempts to explore.

Section One provides information on fish vending and vendors, the problems faced by women fish vendors, and some of the organizational initiatives they have taken to protect their livelihoods. Section Two is divided into three parts. The first compiles post-harvest, fisheries-specific schemes and initiatives undertaken by Central and State Fisheries Departments, as well as by central research institutions and intergovernmental organizations. The second part examines the provisions of the National Policy on Urban Street Vendors and its implications for fish vendors. The third part analyzes the Unorganized Workers' Social Security Act, 2008, from the perspective of fish vendors.

<http://indianfisheries.icsf.net/icsf2006/jspFiles/indianFisheries/womenInFisheries.jsp>

PUBLICATIONS

Sharing the Ocean: Stories of Science, Politics and Ownership from America's Oldest Industry

By Michael Crocker. Photographs by Rebecca Hale. Tilbury House, Publishers, and Northwest Atlantic Marine Alliance, Maine, US. Pbk. 134 pp. 2008.

This book explores how an ideology shared by officials at the United States National Marine Fisheries Service and mainstream environmentalists has paradoxically sustained the ecological crisis and led to an unjust distribution of access to the fishery. A major goal of the book is to demonstrate how deeply the fisheries crisis and, indeed, most natural resource dilemmas, are influenced by competing social values. Using a collaborative change approach, the Northwest Atlantic Marine Alliance (NAMA) has worked with fishermen, environmentalists and policymakers to come up with a shared vision for the future.

VERBATIM

Chance is always powerful. Let your hook be always cast; in the pool where you least expect it, there will be a fish.

—OVID (ROMAN POET, 43 BC - 17 AD)

INFOLOG: NEW RESOURCES AT ICSF

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

Videos

Resisting Coastal Invasion : Documentary by K P Sasi. 52 min

A documentary on the proposed changes in coastal laws in India. The move is to change the Coastal Regulation Zone Notification to a Coastal Management Zone Notification. These changes are likely to open up the coast to various hazardous industries, tourism and sand mining, including mining inside the sea. The coastal ecology and the lives of fishing communities are threatened. India's fishing communities are resisting the move since their livelihoods and existence are threatened.

Farmed Salmon Exposed : Documentary by Damien Gillis

Produced for the NGO, Pure Salmon, this documentary reveals the issues plaguing the industrial aquaculture of the carnivorous species of salmon, and features testimonials by witnesses discussing the environmental and socioeconomic damage of salmon farming, including on Southern countries' fishing communities and fish stocks, caused by poorly managed fish farms.

Publications

To Draw the Line: A Report about EU Fisheries Agreements in West Africa

Fisheries partnership agreements enable the European Union (EU) to buy fishing rights from other countries, not least in West Africa. As part of these so-called partnerships, the EU is meant to contribute to sustainable development in the contracting State. The Swedish Society for Nature Conservation (SSNC) has interviewed fishworkers, civil servants and government representatives in west Africa and in Europe. They found that this aspect of partnership is an illusion. Funds do not reach the intended purposes, fish stocks are decreasing and the lives of fishworkers in contracting States are harder than ever. The European Commission acknowledges these failures, in which Sweden is complicit, and encourages all stakeholders to contribute actively to the development of a reformed fisheries policy for 2012. This report describes how responsible partnership could be achieved.

Report of the Global Conference on Small-Scale Fisheries: Securing Sustainable Small-scale Fisheries: Bringing Together Responsible Fisheries and Social Development. Bangkok, Thailand, 13-17 Oct, 2008. FAO Fisheries and Aquaculture Report No. 911. Rome, 2009, 202 pp.

This report provides a summary of the presentations, panel statements and working group discussions of the 2008 Bangkok Global Conference on Small-scale Fisheries. The conference identified several critical ways forward in securing sustainable small-scale fisheries that integrate social, cultural and economic development, address resource-access and use-rights issues, guided by human-rights principles, and recognize the rights of indigenous peoples.

FLASHBACK

A holistic and coherent strategy

With at least 300,000 people from 11 countries in the Indian Ocean region dead, or still missing and presumed dead, the tsunami of 26 December 2004 counts as among the worst natural disasters in recent history. Apart from the loss of life, damages to houses, fishing vessels, agriculture lands, equipment and infrastructure, have been high, estimated to exceed US\$13.5 bn. Coastal fishing communities, among the most vulnerable sections of society, were particularly affected. The Food and Agriculture Organization of the United Nations (FAO) estimates that a quarter of all fatalities were from fishing communities.

The local, national and international responses to the disaster have been tremendous. Particularly heartening has been the massive mobilization of local and in-country resources and volunteers in the post-tsunami period, especially in the relief phase. Aid and promises for further aid have also come from the international community. It is to be hoped that these promises are kept.



It is as important that the aid received be channeled in ways that actually improve the quality of life of the affected communities in the long term. Declarations and statements that have come out of regional and international processes involving peasant and fishworker organizations and NGOs in the post-tsunami phase, lay out key principles and strategies for rehabilitation of fisheries and agriculture-based livelihoods. At a very fundamental level, the participation of affected communities, particularly of vulnerable groups among them, in the design and implementation of rehabilitation initiatives, must be ensured.

From a fisheries perspective, it would be imperative to ensure that rehabilitation initiatives do not lead to an overall increase in fishing capacity. This continues to be a real danger, especially where co-ordination of aid is weak, and where there are no clear policy frameworks for delivery of aid. Well-intentioned aid may just end up increasing the vulnerability of livelihoods in the long term.

The matter of replacing damaged fishing units should also be approached with caution, particularly where their operations were leading to social conflicts and overfishing in the pre-tsunami period. In many cases, the operations of such vessels were economically unviable, to begin with.

— From Comment in SAMUDRA Report No. 40, March 2005

ANNOUNCEMENTS

MEETINGS

30th Annual Symposium on Sea Turtle Biology and Conservation of the International Sea Turtle Society, Goa, India, 27-29 April 2010

The 13th annual symposium on sea turtle biology and conservation seeks to explore the world of turtles and the connections and focus on the world they live in. The symposium will also host a special fisheries forum to focus on various

dimensions of the interaction between fisheries and sea turtle conservation and research.

Global Conference on Aquaculture, 9-12 June 2010

Ten years after the millennium conference, with aquaculture now providing nearly 50 per cent of global food fish supplies, FAO, in partnership with NACA and the Thai Department of Fisheries, is organizing the Global Conference on Aquaculture 2010, to evaluate where the sector

stands today and how to face the challenges and opportunities. The conference will provide a global forum to build consensus to advance sustainable aquaculture development and contribute to the Millennium Development Goals.

Review Conference of the United Nations Fish Stocks Agreement, New York, US, 24-28 May 2010

<http://www.un.org/depts/los/index.htm>

WEBSITES

Seychelles hook-and-line fishermen's association

To promote responsible fishing techniques and resource sustainability, the Seychelles hook-and-line fishermen have launched a Label Programme. In partnership with the Seychelles Fishing Authority and the Seychelles Bureau of Standard, a code of conduct, which includes standards criteria, has been established.

<http://seychelles-hookandline-fishermen.org/>



Endquote

Song of the Istanbul Hamsi Fishermen

*Oh I am a fisherman
and I fish in Emirgan
and I haul the mighty hamsi from the deep
I fish there come what may
and they seldom get away
and the ones I bring ashore I always keep.*

*Peep in my yoghurt pot
and you'll see I've caught a lot
although, with cig in mouth, I try to look blasé
I never show delight
even when my line is tight
as if 'eight at once' just happened every day.*

*Oh the hamsi he is strong
several centimetres long
and he wriggles like a devil to be free
but he knows he's had his lot
when I slip him in my pot
for he has a dinner-date at home with me.*

*So it's home at evening's chill
to Reshitpasha up the hill
with my hamsi pot a-bobbing on my knee
I'm not a layabout
and the bus is crowded out
so why does no-one come and sit near me?*

Hugh Mitchell

(Translator's note: 'Hamsi' is the Turkish word for 'anchovy'.)

