THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



ITQs in New Zealand

Finfish Farming in Atlantic Canada

Sustainable Small-scale Fisheries

Salmon Aquaculture in Chile

South Africa's Fisheries Policy

Voluntary Guidelines for SSF



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REPORT

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BACK COVER



A mussel harvester in Eastern Cape, South Africa

Photo : Jackie Sunde

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a balokulwo	
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The other story	4		
New Zealand's experience with individual transferable quotas (ITQs) should be a warning			
ATLANTIC CANADA			
Open nets, closed lives	9		
Open-net finfish farming in Atlantic			
Canada is expanding, but at great costs			
ANALYSIS			
The trickle-down catch			
The trickle-down catch	sheries		
The trickle-down catch	sheries		
The trickle-down catch	sheries		

Not so rosy 23 Intensive industrial salmon aquaculture is expanding massively in Chilean Patagonia

NEW ZEALAND

CHILE

RESPONSE	
A giant leap 2	27
A response to an article	
on South Africa's fisheries policy	
REPORT	
Green, blue and right	1
On the FAO-OECD Expert Meeting on	•
Greening the Economy with Agriculture (GEA)	
ANALYSIS Maria vs Elinor	
REPORT	
A bottom-up, pro-fisher policy 4	2
A meeting in Kolkata, India, focused	
on marine and inland small-scale fisheries	
COMMENT	3
ROUNDUP5	50



Guiding Small-scale Fisheries

A set of international voluntary guidelines is being planned to address both inland and marine small-scale fisheries in developing countries

he Twenty-ninth Session of the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO), held in Rome in early 2011, agreed on the important role played by the small-scale fisheries sector and decided to give it high priority and adequate visibility. The Committee approved the development of a new international instrument on small-scale fisheries. A set of international voluntary guidelines that would draw on relevant existing instruments complementing the Code of Conduct for Responsible Fisheries, to address both inland and marine small-scale fisheries in

developing countries, will be developed. This is to be done with the involvement of all stakeholders. The FAO Council subsequently lent support to COFI by including the work on small-scale fisheries in the Programme of Work and Budget (PWB) for the year 2012-13.

The workshop-cumsymposium on sustainable

small-scale fisheries, organized by the National Fishworkers' Forum (NFF), India, in collaboration with ICSF, and held at Kolkata in September 2011 (see "A Bottom-up, Pro-fisher Policy", page 42), was intended to contribute to the process of developing the proposed FAO guidelines. Drawing participants from a range of fisheries-marine, estuarine, lagoon, riverine, lake, tank and pond fisheries—the meeting illustrated the heterogeneity, diversity and complexity of Indian small-scale fisheries. It provided an opportunity to understand the status of inland and marine fisheries in the context of food security and poverty alleviation. It highlighted good practices in small-scale fisheries management and development, and in welfare and social-security measures; it also identified gaps that need urgent attention.

The Kolkata meeting revealed how the fisheries sector receives the lowest priority in comparison with forestry, agriculture and industry, and how the legitimate livelihood interests of fishers and fishing communities are often overlooked in inter-sector conflicts over land and water resources. Fishing community representatives who spoke at the meeting sought protection of their fundamental right to life and

livelihood, and their right to be treated with dignity. More than anything else, the meeting underscored the importance of adopting a rights based approach to development in the case of vulnerable fishing communities, and the need for developing guidelines on securing sustainable small-scale fisheries within a pro-poor, human-rights and ecosystem-based framework. A significant outcome of the meeting was the clarification of the term 'small-scale fisheries' in the Indian context.

At least nine similar meetings are scheduled to be held under the auspices of civil society organizations such as the World Forum of Fisher Peoples (WFFP) and

the World Forum of Fish Harvesters and Fishworkers (WFF) during the next three months to contribute to the guidelines process. These are to be held in Sri Lanka, Pakistan, Thailand, Senegal, South Africa, Uganda, Brazil, Honduras and Costa Rica. The Senegal meeting will have participants from 12 countries in west Africa.



These meetings, as in the case of the Kolkata workshop and symposium, are meant to contribute to clarifying small-scale fisheries in different parts of the world, to document good practices in small-scale fisheries, and to identify threats facing small-scale fisheries and fishing communities. They are expected to improve the visibility of small-scale fisheries at the regional, national and local levels, to open up channels of communication between the State and civil society organizations, and to influence government positions on the proposed guidelines during the FAO technical consultation in mid-2012.

This is the first time that several meetings are being organized under the auspices of civil society organizations in preparation for a proposed FAO fishery instrument. These meetings and their pertinent outcomes should be seen by the FAO Member States and the Secretariat as an opportunity to benefit from a bottom-up process to develop meaningful, voluntary guidelines on securing sustainable small-scale fisheries, to complement the Code of Conduct for Responsible Fisheries. They should also be seen as a promising beginning to broadening the participation of civil society organizations in the fisheries work of FAO.

The Other Story

New Zealand's experience with individual transferable quotas (ITQs) should be a warning for developing countries with fisheries-dependent communities

> he New Zealand fisheries quota management system (QMS) using individual transferable quotas (ITQs) has an international reputation for good fisheries management. The consequences for many coastal fishermen and their communities, are, however, another story. My fear is that if this form of ITQs is used for the coastal fisheries of developing the consequences nations. for artisanal fishermen and their communities will be more devastating.

> Ideologically, "think big" was a forerunner of neoliberalism which emphasizes privatization (in this case, of catch rights), market forces (globalization) and deregulation (less government control). The fisheries

The political ideology was to "think big", so the New Zealand fishing industry expanded to meet the growing international markets.

were the first industry restructured New Zealand's form neoliberalism—"Rogernomics" with the introduction of the OMS in October 1986. In particular, it facilitated the corporatization of the coastal fishery and the exclusion of small and community fishermen. Restructuring of the fisheries with the QMS went further with a change from fisheries management using input controls to a neoliberal, property rights-based management system with ITQs. Ostensibly, the QMS was introduced in New Zealand to resolve a perceived crisis of overfishing

and overcapitalization experienced by coastal fishermen.

In 1978, New Zealand declared the 200-nautical mile exclusive economic zone (EEZ) which enclosed the deepwater fishery. The political ideology was to "think big", so the Zealand fishing industry expanded to meet the growing international markets. New Zealand companies became increasingly corporatized and bought the 'big boats' (100-footers, 30 m in length). Though big by New Zealand standards, they were inadequate for deepwater conditions. To remain economically viable, they fished prime species on the coast, threatened the livelihoods and economics of the coastal fleet, and established fishing history that later translated to quota, and, with the loan schemes to enlarge coastal vessels, facilitated the inshore crisis that justified the QMS. Since some of these 'big boats' were pair trawlers and the coastal snapper fishery was the only fishery using this method, it seems more a ploy to take over the coastal resources than to develop the deepwater fishery. A government discussion document noted the top 50 boats, including these newly imported 'big boats' belonging to the big companies, landed 45 per cent of the annual coastal catch and just 2.2 average 'big boats' caught the catch landed by the bottom 2,000 boats.

Deep waters

In 1983, rather than converting these 'big boats' into vessels more suitable for the deep waters, the Ministry of Agriculture and Fisheries

This article is by **Leith Duncan** (leithswd@gmail.com), an independent fisheries researcher based in New Zealand

(MAF) left them on the coast and changed the legislated criteria for commercial fishing licences as a result of which 2,260 fishermen were excluded from the fishery, without compensation. Of these, 1,500-1,800 were part-timers. MAF knew the importance these rural/urban differences but between part-timers were concerned to 'professionalize' the fishery. Clearly, government priorities lay with big business, not with the interests of small fishermen and coastal communities. The Ministry of Fisheries (Mfish, as it is currently known) now realizes that the exclusion was a failed and unnecessary policy.

Had the 'big boats' been restricted to the deepwater or 'translated' into vessels more appropriate for the deep waters, there may have been no need to restructure the coastal fleet so radically. Part-timers may have been numerically difficult to administer but the amount of fish they caught, although crucial for their communities, was comparatively infinitesimal. They could have been managed outside the QMS-as with recreational and Maori fishermen or using overseas precedents such as in Chile, where artisanal or inshore fishermen are managed separately from industrial fishers. Given the increase in number of Mfish staff required to administer QMS, part-timers could have had their own OMS if necessary. Restricting the 'big boats' more tightly to the deep waters or to less preferred species might have been a suitable compromise.

The big companies, already vertically integrated, corporatized and market-oriented, were poised to compete in the quota market and an increasingly neoliberally globalized They quickly aggregated (consolidated) the quota to control access to the resource. This is so-called 'rights-based' since element of privatization creates the property right, with overriding ownership the human rights communities their fishermen on the basis of proximity and customary use. addition, quota became

investment, putting it even more out of the reach of ordinary fishermen.

ITQs in New Zealand are a right to harvest a particular proportion of the total allowable commercial catch (TACC) of a particular species from a particular quota management area (QMA). The actual amount that can be taken on an annual basis is referred to as the annual catch entitlement (ACE). Thus, the quota might not change, but if the TACC is changed, then the amount of the species able to be caught in the specific year also changes, but remains the same proportion of the TACC. With the system came more stringent reporting requirements (catch/landing returns).

Fish must be landed to licensed fish receivers (LFRs), a low-profile but intrinsic part of the QMS, as a crosscheck on fishermen's returns, for compliance purposes. Most LFRs were larger companies; with company closures and consolidations and increasing vertical integration, there are fewer fish buyers. Increasingly, most fish is exported overseas or processed for value-added



The Hauraki Gulf, showing the locations of the three communities, Waiheke, Coromandel and Leigh. Before the quota management system, they all had thriving fishing fleets

commodities for supermarkets. Compared with fishermen's perhaps more personal relationships with their buyers before the QMS, control over fishermen is now greater since many are dependent on the company for ACE so they are tied more formally by contractual relationships. The company sets both the price for ACE and the landed price for fish.

In keeping with corporate needs to minimize costs, the landed price of fish to the fishermen remained at pre-QMS levels, and ACE-dependent fishermen were increasingly marginalized. Corporate control of quota also transferred the food and nutrition of fresh, locally caught fish from the community to international markets. The financial benefit went to corporates and their shareholders.

Before the QMS, the three communities I studied in the Hauraki Gulf all had thriving fishing fleets. There were some 37 registered fishing vessels based on Waiheke Island, with a fishing co-operative for about 20 fishermen that put a million dollars into the community annually and was

Before the quota management system, commercial fishing was more community-oriented.

probably the largest industry on the island. In Coromandel, there were 49 vessels and 18 in Leigh. After the QMS, the Waiheke co-operative folded up but the two or three remaining fishermen run charter trips recreational fishers and now one of them sells a tiny amount of fish at the wharf one day a week. On Coromandel, only five or six boats were still operating. Leigh, At remain though, some 20 and company, Leigh Fisheries, specializing in selling chilled fish internationally, services more than 44 fishing boats in the Hauraki Gulf and on the northeast coast of New Zealand. So, unlike Waiheke and Coromandel, Leigh is still a fishing village.

In the late 1970s and early 1980s, most Waiheke fishermen were long lining prime snapper, with each fish spiked and chilled for the high value Japanese iki jimi market. Snapper that were not suitable and other species such as gurnard and John Dory supplied the local fish shops and 'home freight' where fishermen and crew took 'a meal' to feed their families and neighbours. This 'informal economy' and the fish sold through the shops made a significant contribution to the community's food security. These boats provided jobs not just for the owner-operators and crew in the schooling season but also for engineers, boat maintenance men and repairers, and other tradesmen and suppliers and, importantly, they were also the salvation for a number of teenagers diverted from delinquency.

Before the QMS, commercial fishing was more community-oriented. For example, for 22 years a fisherman launched his boat across the beach in front of the Onetangi Hotel, perhaps the only place in New Zealand where this happened, and supplied the guests and the local community with the fish they wanted. Just before the QMS, the hotel won a national competition for the best restaurant fish dish. After the QMS, the hotel, as required, applied to become an LFR, but the application was declined since the hotel "was not unique enough". Now tourists and visitors coming to Waiheke Island to eat in top restaurants are disturbed to find the fish is not caught locally and bought directly from the fishermen but is bought by a wholesaler, transported to the Auckland Fish Market, processed by filleters, and ferried to the island for the restaurant.

Output controls

For local fishermen, the QMS meant the complexity of another bureaucratic change from a controlled fishery, with limited entry and input controls, to the output controls of ITQs and uncertainty from new rules, regulations and processes. It meant their ethos changed from fishing as a lifestyle or vocation; a change from the flexibility and relationship of supporting their community and the fishing co-operative to business

transactions where they fed products into a supply chain over which they had no control

The fishermen's response varied. Reporting requirements and other restrictions compounded paperwork and, for some, increased the incentive to lease or sell their quota and 'get out' with a nest egg to do other things. Others remained fishing and either sold their quota but leased it back on the promise that fishing would continue as before; some others, particularly the more business-minded, some with the backing of Leigh Fisheries, came to grips with the system, retained ownership of their quota or bought more and continued fishing. The Waiheke fishing co-operative collapsed. Those leasing quota, especially from the companies, were obligated to sell them their catch, and so lost the previous flexibility to sell within the community. Places like Leigh that still had fishing companies remained fishing communities but others like Waiheke and Coromandel lost fishing livelihoods for their members and the basic food security and nutrition that had been provided by fresh, locally caught fish.

So the expressive aspects of the fishermen's ethos, their identity, independence and freedom 'out there', contending with the large marine environment and hunting elusive prey were reduced, and they became closer to being just instrumental operators, micromanaged at the beginning of the commodity chain.

Comparatively few fishermen, new part-timers, are debt-free, and retain a passion for their work and a detailed ecological knowledge of species and fishing grounds, so they can easily catch the fish their market requires, meet increasingly stringent company requirements and still enjoy their boats and the marine environment. In general, though, the coastal fleet is in decline and, particularly, ACE-dependent fishermen are increasingly marginalized.

Quota ownership reinforces the hierarchical relationship between skipper and crew, shifting emphasis from the prime focus on fishing skills



Waiheke longliners at the Matiatia pontoon gearing up for an *iki jimi* trip. Around 37 registered fishing vessels were based on Waiheke Island

to quota acquisition ability in a more dominantly commercial market. The property rights-based management system has taken fisheries in New Zealand from an expressive system in which fishermen experienced an ethos of 'freedom' and serviced local communities and domestic and export markets, to a far more instrumental and utilitarian system.

For communities like Waiheke and Coromandel, the QMS has meant a general loss of access to the fisheries, and, therefore, to a source of livelihood and nutrition, as well as the loss of a significant aspect of community identity. Fishermen and crew in the community miss out directly in terms of occupation but others such as engineers, mechanics, boat repairers, fish shop retailers and consumers do also indirectly. The fishery seems as, or even more, marginal for small operators and community members than it was before the introduction of the QMS.

Bureaucracy

The requirement to land to LFRs and the bureaucracy involved for local retail outlets in becoming and remaining an LFR meant that communities did not have fish receivers, and so fishermen were generally no longer able to land or distribute fish to community outlets. Thus, residents in most coastal communities were deprived of fresh,

locally caught fish. The few fishermen around the Hauraki Gulf with wharf sellers licences improved the situation only slightly. Communities were deprived of fresh fish, lost livelihood opportunities and had to make do with expensive processed supermarket commodities such as crabsticks or fish fingers.

The change with rights-based management has not led to the simplification intended but, instead, to an exponential expansion of bureaucracy, costs and corporatization that has shifted allocation of fish from community and coastal fishermen to big business. From having fish and fishermen supplying a local market, New Zealand now deprives much of the local market of fresh, locally caught prime fish species and, instead, exports them to service a predominantly international market, mitigating the loss to communities with convenience commodities. In the domestic markets, restaurants compete with international markets for high-value fish, while in the communities of Coromandel and Leigh, 'ordinary' fish are the rejects from international orders.

As fish have become products for a globalized market, fishermen are no longer providing food for their communities; for many, their livelihoods have become a mere struggle for employment. The give-and-take of community reciprocity has become a regime of contracts and instrumental transactions.

The fishermen's ethos has changed from being enterprising owneroperators with relatively egalitarian relationships with buyers. Increased prices for levies, annual boat surveys and fuel mean that many fishermen are now marginal players. Additionally, the cost of ACE, especially for ACEdependent fishermen, implies that they have, in effect, become contractors, with all the costs and responsibilities but none of the privileges of independent operators, and with little hope of realizing reasonable returns on their investments in boat and gear, either now or at retirement. From being community-based, fishermen are

now contractors, just a component of the commodity chain.

The social costs of the QMS were, therefore externalized to the fishermen, especially those ACEdependent, to their families through increased uncertainty and stress and financial pressure, and to their communities through the loss of fresh, locally caught fish. The so-called rights-based OMS has facilitated corporates to take over the access to fish which coastal communities had rights through closeness to them (propinquity) and their usage (usufruct) and reliance.

In the communities studied, the QMS has meant the loss of commercial fishing livelihoods and services as well as the nutrition and food security that was provided by fresh, locally caught fish. For these communities, there were alternatives from the tourism industry, with support from vineyards, wine making and restaurants. There has now been a shift to external markets.

For developing nations, where coastal communities and artisanal fishermen are dependent on local fish, the outcome of ITQs may be much more devastating and not so easily compensated.

For more

fs.fish.govt.nz/Page.aspx?pk=81

Quota Management System (QMS),
Ministry of Fisheries, New Zealand

en.wikipedia.org/wiki/Hauraki_Gulf Hauraki Gulf, New Zealand

Open Nets, Closed Lives

Open-net finfish farming in Atlantic Canada is expanding, but at great costs to the marine environment and communities

ver 30 years ago, open-net salmon farming operations were introduced into Atlantic Canada marine environment. At that time, these were small, locally operated fish farms (stocked with around 5,000 fish) that benefited the local communities. These operations, owned by locals, who bought supplies from other local businesses were, however, soon replaced with large farms owned by a few multinational companies; and with that, benefits to the communities dwindled and impacts on the marine environment increased significantly.

With the size and intensity of these 'new' larger operations came disease, sea lice infestations, and significant degradation to the marine environment. Initially, in Atlantic Canada these open-net operations were largely concentrated in New Brunswick, but companies have expanded to Newfoundland and Nova Scotia. And they are expanding in a big way-proposing and being licensed for farms that do not contain 200,000 or 300,000 fish, but commonly I mn fish per site. Such operations (and consequently our coastal waters) will be wrought with problems since companies are using essentially the same technology (open-net) as was used for a lone 5,000-fish farm, and regulations are lax and unenforced. These spell problems and costs to the marine ecosystem, the traditional fisheries and fishermen, and inevitably lead to disease and sea lice infestations.

Sites with larger numbers of fish make existing problems worse, namely, (i) the probability of disease and sea lice outbreaks increases, as does the use of pesticides and chemicals to treat them; (ii) the potential number of farmed fish that will escape and further the decline of already endangered Atlantic salmon populations increases; and (iii) the faecal matter and waste feed pollutants that are released into the marine environment are also increased, degrading the sea bottom and habitat, and changing the ecosystem.

The coastal waters of SW New Brunswick, where these operations have dominated, are prime sites for these problems. They have struggled with disease—infectious salmon

The marine environment has been polluted by the release of these chemicals (which are lethal to other non-target species, such as lobster) into the waters.

anaemia (ISA) outbreak in 1996-and sea lice infestations. In response, the industry has used more lethal pesticides as prior treatment regimes fail due to resistance. The marine environment has polluted by the release of these chemicals (which are lethal to other non-target species, such as lobster) into the waters. The waters are also routinely polluted by waste, the vast amounts of fish faeces and waste feed that are generated by these operations.

Production cycle

A conservative estimate of the amount of fish faeces and feed waste that is released into the waters by I mn fish, in every production cycle, is I,000 tonnes. And that is just for one site. Many sites have been approved or proposed for the coastal waters of

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A fisherman in the north of Fraser beach. An independent fisherman can make a much better income than a wage employee of an aquaculture operation

Nova Scotia and Newfoundland. The effect is to degrade the marine environment and fish habitat. The ocean bottom beneath the cages is smothered by the vast amount of nutrients being deposited, and significant species loss occurs here (even, in some cases, to the point of the creation of 'dead zones'). The movement of the water can disperse these pollutants, so that the effects of the environmental impacts can also be far away from the cage sites and can co-mingle with the impacts from other sites in the area, accumulating the negative effects. Scientists of Canada's Department of Fisheries and Oceans (DFO) studying the impacts in New Brunswick have stated that "substantial changes to the functioning of the ecosystem have occurred due to the presence of salmon farms". This cannot be ignored as our traditional fisheries and the rural communities that depend upon a healthy marine environment for their livelihoods have been put at unacceptable risk. Their traditional fishing grounds are being taken away and the marine environment is being degraded. And yet, these problems are being ignored. In its rush to promote the industry, the government's primary responsibilityto regulate it-has been overridden. There is a conflict of interest, and the government's preferred role of promoter is not in the best interest of the public.

What, however, are the benefits of this industry to the Canadian public? Do the benefits that we can expect outweigh these problems/impacts? The government and industry indicate that the communities will greatly benefit by the jobs that are produced, which is the main rationale for promoting the industry. Many jobs have been promised.

But what is actually happening, and what kinds of jobs are created? Are these part-time or full-time, temporary or permanent? government does not make this clear. However, if we look at the aquaculture employment statistics for Nova Scotia for 1998-2009, we note that although the production increased, the number of people employed decreased. In aquaculture in Nova Scotia employed just 125 full-time (and 92 part-time) persons, and reported Can\$47.6 mn in revenue. The traditional fisheries yield much more employment per mn Can\$ generated. In 2009, the lobster fishery alone employed 10,000, to generate Can\$400 mn in revenues. Even if a processing plant would be established in Nova Scotia, aquaculture still falls short in the employment that it can generate compared to the traditional fisheries.

Aquaculture jobs are minimal in both pay and number. An independent fisherman can make a much better income than a wage employee of an aquaculture operation. And if opennet aquaculture negatively impacts the traditional fisheries, as is proving to be the case, these traditional fishery jobs could be lost. It appears then that, in the longer term, what actually could occur is a significant net job loss rather than any job benefits to the community, if this industry is permitted to continue to operate as it does.

Tax benefits

Currently, the communities get no tax benefits from these operations, and few job benefits, but have to bear the environmental and economic costs; the operations are a net loss to these rural communities.

It was reported in January 2011 that in New Brunswick over 100 have been hired from overseas to work in aquaculture operations.

The open-net finfish aquaculture industry has been operating for 30 years with essentially the same technology, but it has grown from 5000 fish per site to 1 mn or more fish per site. It has expanded and intensified but is still using the same method: open-net systems, with automation and some 'improved' feed formulations. With the intensification of the industrial operations, the problems too have intensified. What can be done? Aquaculture is here to stay, but the way that it currently operates is not sustainable. It must change to become more sustainable and operate in a manner that does not harm the traditional fisheries and the environment.

In order to do this, the industry must innovate. It must convert to closed containment systems that have become available. This will spare the marine environment from degradation, avoid putting at risk existing fisheries and endangered wild Atlantic salmon, produce a healthier product (as disease and sea lice can be controlled in a closed environment), and will probably allow shorter production cycles for the farmed product, all of which will help meet the government's objectives of developing aquaculture and creating jobs.

To date, the industry has been lamenting that the costs to do all this are too high. The flip side is, the costs for them not to do this are too high for our environments and economiesboth from a marine and community perspective. Above 50 per cent return on investment has been reported for open-net operations. The industry can well afford to convert to closed containment systems. Unfortunately, only 'bottom' this industry seems to be concerned with is their bottom line, not the ocean bottom. The extraordinarily high returns on investment are accomplished by not having to invest in disposal systems for their operational wastes. This cost has, instead, been shifted to the

environment and the communities in which they operate. It is past time that the industry accounts for all their costs, makes a more reasonable return, and spares the marine environment.

Open-net aquaculture is depleting our assets. We are in an era of having to deal with scarcity. We can ill afford industry to exploit our resources any longer. It is our

Aquaculture is here to stay, but the way that it currently operates is not sustainable.

government that must recall its regulatory role and force industry abide by strict standards. Industries and governments must combine economic growth with an obligation to conserve and protect the environment. This obligation has not been met thus far. We are running out of time—the problems get worse and at an increasing rate every year. The industry must change its thinking, strategies and actions, and pursue the development of technological innovations that will allow growth while preserving and protecting our natural resources. For aquaculture, this can be accomplished by closed containment systems, and governments must establish mandatory time frame in which this conversion must occur.

This is a larger global issue that must be addressed as open-net aquaculture is proliferating in British Columbia, Chile, Scotland, Norway and in several other places around the world. In most cases, the same 'best' industry practices are used, with the same dire consequences to our marine environment, traditional fisheries and communities.

For more

R

www.livingoceans.org/initiatives/salmon-farming

Living Oceans

www.farmedanddangerous.org/salmonfarming-problems/what-is-salmonfarming/

Farmed and Dangerous

responsibleaquaculture.wordpress. com/2011/05/27/alert-to-nova-scotia-fishermen/

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Study on Impact of Open-net Salmon Farms on SW Brunswick Fishermen

The Trickle-down Catch

Broad governance issues hamper the sustainable management of small-scale fisheries in developing countries

Problems cannot be solved at the same level of awareness that created them.

—Einsteir

he current world fisheries crisis is characterized by vast overcapacity of fishing fleets, growing depletion of major fish stocks, evaporation of economic rent, and high incidence of illegal, unreported and unregulated (IUU) fishing. The crisis has been fuelled by ineffective governance, and is now exacting increased efforts from fisheries administrations worldwide to dedicate

of small-scale fisheries in developing countries.

"The development of national fisheries" is a catch-phrase that stems from the 1960s and 1970s, when newly independent countries looked at fisheries as a means of fuelling national economic development and growth. The policies pursued at the time were often entirely productionoutput-oriented, with little, if any, thought being given to the need to manage renewable but finite resources in a sustainable manner, and making them work for the fishers and their dependents, as much as making them work for big money and large-scale investments sourced from outside. The argument that fisheries resources are finite is one that has still not been accepted by many todayadministrators and exploiters alike.

Many formal government policies drafted at the time positioned the fisheries growth paradigm as the central clause of formal fisheries policy letters. Fisheries have 'developed' a lot since then, and have formally entered the age of the 'global fisheries crisis'. However, instead of this crisis giving rise to more and more revised national fisheries policy frameworks, production-oriented fisheries policies have often remained in place and continue to drive national fisheries affairs-in those countries where national policies on fisheries exist, of course.

Demand for fish has been rising unabated for the last three decades, and fish has now become the most traded and most valuable natural resource...

increased resources to improve governance of fisheries sectors, and reverse current trends.

The crisis has been largely driven by expanding world markets for fisheries products. Demand for fish has been rising unabated for the last three decades, and fish has now become the most traded and most valuable natural resource commodity in the world. About 40 per cent of all harvested marine products enter global fish trade, whose export value has reached nearly US\$90 bn per year, a value which has increased by around 1,000 per cent since 1976. All of this is not without impact on small-scale fisheries.

My musings address some of the broader governance issues that hamper the sustainable management

Development-oriented policies

There is a clear need to steer clear of purely production-oriented policies. Development-oriented policies have to be replaced with

This article, by **Gilles Hosch** (hosch@pt.lu), an independent fisheries adviser, is based, to a large extent, on papers by the same author tabled at the first ACP Ministerial Fisheries Conference held in Brussels in 2009

policies pursuing goals of sustainable management. The term 'sustainable' is understood to apply to the three dimensions of social, economic and biological imperatives. Only under scenarios where these three dimensions are accommodated effectively, may successful outcomes in fisheries management ensue and be maximized.

In many countries, there is an urgent need for policy reform-and then, and most importantly, policy implementation. New policies will call for reforms of the sector, and reforms invariably prove to be costly undertakings-both in financial and political terms. The international blueprint for fisheries policy reform and orientation was published by the Food and Agriculture Organization of the United Nations (FAO) in 1995, in the form of the Code of Conduct for Responsible Fisheries. The Code is widely recognized as the instrument of reference for policymaking and fisheries management. Its scope encompassing and universal, principles are anchored international law, and its nature is voluntary. The goal of the Code is to assist all entities to formulate approaches to fisheries management that ensure sustainability at all levels. At 41 pages in length, it is the shortest and best resource available for fisheries policymakers worldwide to source from. It has been translated into dozens of languages. Although the Code has been paid a lot of lip service, its effective implementation governments worldwide—as shown in a string of studies and papers published in recent years—is generally low.

Formal fisheries management consists of a set of government services that generally requires plenty of financial resources, in order to produce desired results. In countries of the Organization for Economic Co-operation and Development (OECD), it has been shown that 4 per cent of the total value of the production is a reasonable figure that should be allocated for fisheries management. Fisheries management is an overly technical matter that

requires a pool of competent technicians. Many developing countries face the situation where neither financial nor human resources are available in sufficient supply. In such instances, fisheries management services from government are provided under severely limiting conditions.

This situation has led to a state of de facto resignation, where the objective of achieving sustainable fisheries management has seemingly given way to the day-to-day execution of administrative tasks, far removed from the needs for fisheries reform and strategic planning.

addition to this, many developing countries have taken to the concepts of fishing at maximum sustainable yield (MSY), putting in place total allowable catch (TAC) limits and quota systems, having imported these directly from developed country and temperate fisheries contexts, as the seemingly only way of 'seriously' managing fisheries. However, few have got the necessary research capacity to confidently establish stock status figures, and to administer such highly complex (and questionable) systems. A 2007 European Union (EU) Court of Auditor's report established that the EU itself did not have the necessary structures in place in its major fishing nations to administer its own TAC and quota system to any reasonable degree. It arises that



Artisanal fishing vessels landing their catch at the Dar-es-Salaam port, Tanzania. Many developing countries have to cope with scarce financial and human resources

many developing countries have been advised to adopt complex Western fisheries management systems that stand no single chance of proving effective under the given limitations.

With respect to traditional fisheries, we generally observe that fisheries that were managed under community management rules before national independence from colonial rule, then fell under the mandates of centralized government authority

...it is useful to take a look at which management systems have existed in the past, and were developed and owned by fishing communities themselves.

after independence. Systems that, in some instances, had been functioning for centuries were scrapped to be replaced with centralized schemes that often did more harm than good. While it is not possible to generalize, we find in many instances that established community-based fisheries governance systems—some of which were full-fledged rightsbased systems-were replaced with centralized schemes that effectively contributed to liberalizing access in coastal fisheries that had previously been regulated and policed locally through formal or less formal community structures. One of the reasons why governments failed in centrally administering coastal fisheries was the limited manpower available interact with to communities—communities being spread along coastlines, sometimes thousands of kilometers long, or hundreds of archipelagos across vast maritime spaces.

There is little salvation in science- and technology-driven fisheries management approaches for countries that cannot afford them. Developing countries that cannot afford to allocate vast budgetary resources to fisheries management should, nevertheless, figure out individually what mix of simple and robust fisheries management tools

are of use for their particular situations. A situation of 'limited resources' does not have to be synonymous with 'dysfunctional fisheries management'— although experience sadly shows that it often is.

As a first step, it is useful to take a look at which management systems have existed in the past, and were developed and owned by fishing communities themselves. Some of these have been highly effective in limiting access, in conserving spawning grounds, spawning cycles, juveniles and emblematic species. Working with communities transfers part of the burden of management to coastal communities, and directly involves primary stakeholders in the efforts to conserve and sustainably manage the resources they depend upon for their livelihoods. While the transition from a current model to a new model takes time, will and resources, it is necessary to bear in mind that all transitions do.

Countries such as Samoa have already provided the world with excellent examples of how coastal fisheries reform can be successful by putting coastal fishing communities back on to the centre stage, and endowing them with the legal rights and duties to manage and protect their own—and hence the nation's—resources.

A second step is to take a look at the spiralling sophistication of adopted management frameworks. In many instances, new fisheries laws and regulations have not contributed to making fisheries management simpler and more pragmatic, but have rather contributed to making things more complex—irrespective of past experience.

Stock assessments

Countries that have not got the run capacity to reliable stock assessments should refrain from adopting or maintaining TAC quota systems. These meaningless under limiting conditions, and generally harbour the danger of increasing allocations under the excuse that vast margins of error allow for this in the first place. Instead of controlling what comes out of the water (that is, output controls), administrations would be well advised to stick to input controls. Input controls can be adopted under (community) rights-based mechanisms, which are generally favoured from the point of view of addressing problems related to overcapacity.

The first limit on input is access, in the form of mandatory licence schemes. While this is practical in semi-industrial and industrial-scale fisheries, it is often not so in small-scale fisheries.

Simple data collection schemes on basic biological indicators such as catch per unit effort (CPUE), lengthfrequency distributions, species diversity in the catch or mean species size can provide sound information to monitor and manage coastal fisheries with a reasonable amount of knowledge and confidence. Such indicators require simple sampling schemes, a few enumerators in strategic locations, and a few people at the centre to process and evaluate information. Instead of pursuing Western goals of establishing complete snapshots of how much fish exactly there is in the sea, trends arising over time from the aforementioned simple indicators provide just as good a picture of how the resources are doing. Management decisions can, and should, flow from such gained insights in an adaptive fashion.

Also, fisheries management plans should be put in place for specific fisheries. The FAO Code of Conduct for Responsible Fisheries conveys such an approach. The 2009 FAO review on the implementation of the Code, with emphasis on Africa, found that very few countries have put proper fisheries management plans in place—which diminishes their capacity to regulate, monitor and adjust measures directed at discrete fisheries in a coherent manner. Fisheries management plans at the community level should be short, simple and pragmatic.

In many countries, small-scale fisheries are de facto social and economic safety nets for the rural poor—and are sometimes referred to as 'poverty traps'. In other countries,

small-scale fisheries have been a choice of life for generations, and are deeply anchored in cultural and social exchanges which structure those communities. While smallscale fisheries are often a last-resort lifeline in the first instance, they are a chosen professional and productive pursuit in the second instance, creating important employment, large volumes of landings, downstream value addition, economic multiplier effects, healthy societies, and intraregional and international trade in fisheries products, and are an important contributor to national and regional food safety.

In 2007, FAO estimated that some 40 mn people worldwide were dependent on small-scale fishing, with another 123 mn dependent on ancillary activities (processing, trade, etc.) for their livelihoods—excluding temporary fishermen. The authors of Sunken Billions note that these figures are likely to represent substantial underestimates. The world population of small-scale fishers is growing faster than the total human population. Growth centres are located in Africa and Asia.

Coastal fishing communities are amongst the most vulnerable of all human communities. They are at the whim of the elements—engaging in the most hazardous profession on

In many countries, small-scale fisheries are de facto social and economic safety nets for the rural poor...

earth-and are exposed to climate change, diminishing resources, low education levels, inadequate health and social services, poor access to infrastructure and markets, and of alternative employment opportunities; much of this is not least because their voices are often not heard in national politics. Many small-scale fishing communities development suffer national actively strategies, instead of

participating in their design, and contributing to shaping the future of their livelihoods. In many cases, national strategies overlook and omit coastal communities, and fail to bind them into functional societal development projects.

In various parts of Africa, we have been witnessing the development of major export markets for fisheries products, and with it, the concomitant arrival of foreign fleets, foreign investment, some onshore processing and packaging facilities, fish-export brokers, and an overall growing contribution of developing-country fish landings to global fisheries production. While the developed and the developing world were producing about the same volumes of marine capture harvests in the late 1980s, the developed world now produces less than one-third, and the developing world the rest.

Catches and exports are rising, export values are sky-rocketing, while small-scale fishing communities remain stuck in poverty, facing everincreasing economic hardship as stocks start to dwindle. It would appear that poverty in fisheries is also intimately linked to rising numbers in fishers in both African and Asian continentscoincidentally also the two continents where fishers earn least. It is clear that in Africa, the rising prices of fisheries commodities are not being captured at the level of the individual fisher and the wider small-scale fishing communities.

'Trickle-down' effects of foreign direct investment (FDI), the holy grail of development banks, seem to be few, and the benefits of FDI-under scenarios where these go hand-inhand with important tax breaks, free trade zone establishments, and transfer pricing—benefits for national treasuries and the wider national economies may be largely forfeited, or even result in a net drain of national wealth. While profits are being captured by, and accrue to, a small number of individuals, the costs and impacts of resource depletion (amongst others) are borne by society, and small-scale fishing communities, in particular.

A 2008 OECD working paper shows that there might be very little direct relationship between international trade in fisheries products, and poverty alleviation in sub-Saharan Africa. Data presented reveal that no demonstrable relationship exists between fish trade and economic growth or poverty alleviation.

The authors of the OECD paper argue that this is due to weak or missing 'trickle-down' effects, failing to redistribute revenues generated by fish exports to the poorest segments of the population.

What seems clear is that fisheries access agreements, free trade agreements (FTAs), FDI schemes and increased trade in fisheries products are not going to be the tools of choice to achieve the Millennium Development Goals (MDGs) with respect to small-scale fisheries and the communities depending on them. In neglecting the very existence of communities, governments are forfeiting the opportunity to turn small-scale fisheries and their communities into engines of economic growth and human development. Why is it possible for South Pacific island fishing communities to pursue dignified livelihoods as small-scale fishermen and women, while this seems to be a mostly elusive pursuit in much of Africa?

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Report of the First Meeting of the ACP Ministers in charge of Fisheries

Roots and Wings

The need for community in the age of globalization becomes apparent when we employ the double vision of interdisciplinarity to the governance of fisheries

his summer one of our national TV channels put cameras on board a coastal steamer—the Hurtigruten—and followed it on its week-long voyage from Bergen to Kirkenes. The voyage was filmed non-stop, with hardly any narration added, and it broke the Guinness Record for the longest TV programme ever. You would think it would have been boring. Yet, no other TV programme in Norway has received such wide viewership.

The programme was an eyeopener for a lot of Norwegians, both in a literal and a figurative sense. An 85-yearold man who was interviewed said that it was the most wonderful TV programme he had ever seen and that he hadn't slept for the whole week after it was telecast. Not only did the programme provide the viewers with a constant flow of images of wonderful natural landscapes in real time as the ship was passing by, but it also allowed them to observe vibrant communities, wherever the boat stopped and uploaded and unloaded passengers and cargo, alongside local people who showed up on the wharf with their music and art performances.

For a few weeks this summer, the TV show was what we talked about. The programme filled us with such a good mood—until the hideous shootout incident on the island of Utøya, for which we are struggling to find a proper word, and which shattered everything. All of a sudden, within a few hours, the image we had of ourselves as a country and a nation changed brutally, most probably forever.

This article is about our images of the coast, the fishing industry and the fishing community, and what they do to us and what we become because of them. A few words to begin with about what I mean by images:

Images are what we read into what we see. They allow us to recognize what we observe. They turn an observable object or event into something that we have an idea of already. Images have consequences for what we do in the real world. When sociologists argue this point, they often refer to the so-called Thomas theorem, which states: "If men define situations as real, they are real in their consequences." It is for

...our images should be made explicit. They should not be taken for granted as true representations of the world.

these reasons that images often turn into self-fulfilling prophesies—as the sociologist Robert Merton said.

Therefore, governance theorists—and I consider myself as one of them—argue that our images should be made explicit. They should not be taken for granted as true representations of the world. They are our own mental constructs, and it is always possible to look at things in different ways. For instance, my colleague Bonnie McCay has argued that we should not necessarily look at the resource commons as something that would inevitably turn into a "tragedy of the commons", as Garrett Hardin phrased it.

Commons comedy

What if we looked at the commons as a comedy—to use another ancient

This article, by **Svein Jentoft** (svein.jentoft@uit.no) of the Norwegian College of Fishery Science, University of Tromsø, Norway, is based on a talk at the 'Fishing People of the North: Cultures, Economies, and Management Responding to Change' meeting, Alaska, 14-17 September 2011

theatrical plot as a metaphor? The implication for how we think about overfishing and how we deal with it would be very different if we shift the image from tragedy to comedy.

I shall run through a number of similar images about the coast and the community, and the argument is the same: It matters how we look at them—for how we think about the coast and the community and what policy implications we draw.

In 1966, Ottar Brox, a now grand old man in Norwegian social science, published a book titled What Happens in North Norway? That book came to change the way we view the fishing industry, and indeed our perspective on this region as a whole. At that time, North Norway was more rural than it is today. People typically made a living from combining smallscale fishing with small-scale farming in a household subsistence-oriented economy. The government, however, had their eye on the gross domestic product (GDP). They were concerned about the relative contribution of North Norway to the overall national economy. When compared to other regions, North Norway did not produce as much as its population

The government should concentrate on improving the conditions on which people made their own choice regarding where to live and what to do.

> size would suggest. For the government, the answer was industrialization of the fishery, as well as urbanization. The government believed that it would do people and the region a favour by helping them to move out of the scattered fishing communities and into better-paid jobs in the cities.

> Troubled by this policy and what it did to his home fishing community, Brox argued that the government needed a new paradigm. He said that rather than thinking of North-Norway as made up of industries and sectors,

the government should look at the region as an aggregate of local communities. Instead of moving people out, it should assist people in creating their own employment. The government should concentrate on improving the conditions on which people made their own choice regarding where to live and what to do. The government should support the industry via their communities rather than the industry directly.

Brox has been, for many decades now, a prominent figure in public debate in Norway. His story is a good illustration of the case I am trying to make here about images: If you side with the community perspective, Brox is a hero—and he has numerous followers in coastal Norway as well as in the academic community. He is indeed also my hero. But if you look at him from the sector perspective, which leaders in the fishing industry and in government tend to do, he appears like a hopeless romantic.

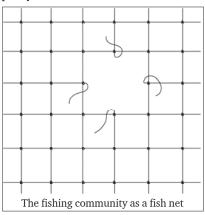
In thinking about the fishing community, I have borrowed the distinction between what the French sociologist Raymond Boudon calls an interdependent versus a "functional" system. The interdependent system is characterized by competition. Here, people are basically in each others' way. Their relationships do not go very deep. Think of a bus queue, for instance, where a bunch of strangers show up, hoping to get in first to find the best seat. But if everyone tries to be first, chaos and conflict are inevitable. The kind of social system that Garrett Hardin had in mind is obviously such a system. The "tragedy of the commons" is bound to occur in an interdependent system.

Then consider the functional system. An example would be a business enterprise, a family household or a soccer team. These are social systems characterized by organization and division of labour where people are members with roles and responsibilities. Here people need to co-operate to realize their goals. The better they know and trust each other, the easier it is for them to do so.

Now, how about a fishing community? What kind of system is it? Is it like a bus queue or a soccer team? In reality, it is, of course, a little bit of both. But let us again, for the sake of argument about images, assume that they are either/or, and then think about the policy implications.

If the fishing community is like a bus queue, people are just in each others' way. They do not need each other. The fewer they are, the better, as there would be fewer people to share the same space and the same resources. Reducing the number of people employed in the fishery can then only be good. For those who remain, the money they bring home will go up. One would expect that the community will become increasingly secure, and a consolidation process will occur until it has reached equilibrium.

Now think of the fishing community as a functional system or as a soccer team: Here people rely on each other and, therefore, have to work together. A loss of members would, therefore, be a problem, as when one player of a soccer team is expelled and the remaining players must carry his task. In the community, a reduction of people will break up social relationships, the social fabric of the community will start to evaporate, and a domino effect may cause the community to collapse. Imagine, for instance, the community as a fish net, where the knots are people and the threads are social relationships. Remove one knot, and it leaves a much bigger hole than just the size of the knot. The policy implications of considering the community as one or the other system should come out pretty clear.





Fisher Ansgar Hansen preparing his catch at the local receiving station in Manndalen in the Lyngen fjord, northern Norway

My next concern is the relationship between sustainable fisheries and sustainable communities—coastal culture as implication or premise. What comes first? What is cause and what is outcome? Does the arrow go from a healthy resource to healthy communities, or does it go in the other way? Again, the policy implications of assuming one or the other are profound. This is why:

If we believe that everything must start with the ecosystem, we would tend to think that as long as we sustain the resource, everything will be fine. Therefore, we would only need to focus on the first variable in this causal chain, and the others would follow suit. We do not need to care about fishing communities, as they will take care of themselves, provided that there is enough fish. Fisheries governance can then be reduced to fisheries resource management and we can forget about the rest.

Coastal culture

Not so if the mechanism works the other way; if the premises are community and culture, and not the outcome. Then we would need to target the community, and nurture coastal culture directly, before we can expect to achieve a healthy marine ecosystem. In fact, securing the community will be a necessary condition for securing the ecosystem. How could that be?

In early September 2011, I attended a meeting of fishers in Cape Town, South Africa. During the debate, a fisher leader stated: "We have two big problems in our fishery: poaching and dysfunctional communities." He offered many personal observations to explain how the two are related.

Ironically, fishers who spoke up at the meeting attributed the erosion of community and the extensive poaching that was going on to the way fisheries management works in South Africa, especially how rights have been allocated through the institution of the individual transferable quota (ITQ) system. "We are no longer the brothers and sisters we used to be. Now we are happy to get rid of one another." I have often heard similar sentiments expressed also by Norwegian fishers about our quota system. The management system, apparently, has, therefore, transformed the community from a functional to an interdependent system, from a soccer team into a bus queue.

I once gave a talk in the Faroe Islands about these things. There they have a tradition that when people gather on festive occasions, they entertain themselves with what they call the "chain dance". The dance is inclusive, and everyone participates. Holding on to each other as they turn, they

CAMILIA BRATTLAND
OIT TO EACH OTHER AS THEY TURN, THEY

Fresh cod hung to dry on a drying rack in the Lyngen fjord, northern Norway. People typically made a living from combining small-scale fishing with small-scale farming

sing ancient, rhythmic chants, handed down through generations. A song may have more than a hundred verses, typically of a moral content. The lead singer is characteristically called "skipper". Only the voices and the feet are heard. For participants, the dance is exhilarating and creates a sense of togetherness. As described on a website: "You have to participate, and when it is at its best, the chain melts together and you feel a part of something vast."

The chain dance is, to me, a beautiful image of a healthy, well-integrated community. What I dared to say in my talk was: "If you want to secure a healthy fishery, you'd better make sure that you keep up the chain dance tradition." I did not, of course, suggest that there is a direct link here, only that there is an indirect one.

Which also brings me to my final question: Is globalization good or bad for such cultural traditions in local communities? Will it kill the chain dance? Will people start behaving as in a bus queue?

It would be bad if globalization makes people confused about where they belong and who they are as a community. It cannot be a good thing if industries become less embedded in the local community, if they forget about their social responsibility. Neither can it be healthy if the Internet becomes the only place where our children find their sense of morality. But is everything about globalization necessarily bad? Is globalization a curse or a blessing? Can globalization be the wake-up call that local fishing communities need?

We obviously need the roots that community provides, but we also need the wings that globalization both grants and requires. We need robust communities that install in people a solid identity. We need communities for the permanence and stability they provide. Communities help us stay sane.

But we also need the modernity and freedom that globalization supplies. Globalization brings prosperity, science, new technology and cultural exchange. Globalization has brought us human rights, which is now an

issue in the debate on how to secure the lives and livelihoods of small-scale fishing people globally. Globalization also gave us the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO).

Thus, our conclusion should be that we need both community and globalization. One without the other is not a good idea. It is a misconception to assume that there is something inherently backward in local communities and in small-scale fisheries. With globalization, they can be extremely sophisticated in the way they operate, and how they produce, communicate and serve markets.

There is hardly any better expression of globalization than the proliferation of mobile phones in South Africa, I learned that small-scale fishers, who are deprived—in most senses of that word—are using mobile phones to access market information. But I learned that they are also using them to warn each other of imminent fisheries inspections—which is a good illustration of the ambivalence that comes with globalization. It can be good and bad at the same time in a way that challenges our social values.

I suggest that we now make this into a research issue. How can communities become more competent and proactive in the global world without losing their ability to provide their members with a moral footing, and a sense of belonging, of home? How can communities turn the threats of globalization into opportunities?

This article has not been about fisheries communities *per se*, but about how we think about them. Most of all, it has been about how images shape our actions in the policy arena.

I argue that we should not stick to just one image, but that we should be willing to entertain as many images as we can imagine, as alternative images give us more policy options. With globalization, communities need to be imaginative. But switching between images is never easy, as it tends to confuse us. Images are not right or wrong, only more or less useful. The reader may remember the famous ambiguous drawing which, if looked at

one way, would show an old woman, but, if looked at another way, would reveal a young woman. Try then to see the old and the young woman at the same time. It is simply impossible. And no matter how hard you strive, you will not be able to identify a middle-aged woman. You, therefore, have to imagine the young woman and the old woman one at a time.

Do we then have to choose between the contrasting pairs of images of community that I have discussed here? Would it be impossible to see them all at once? Could it be that if we only look hard enough, we would be able to see the community as something we have not seen before?



From an analytical point of view, we may have to look at fisheries communities first in one way, and then in another. It is partly for these reasons that science has been divided into disciplines. When economists look at communities (which they rarely do), they see the bus queue, while sociologists and anthropologists see the chain dance. But disciplinary perspectives are too narrow for the real world. That is also why it can be dangerous to let academics loose in it. They cannot easily make the same argument in the real world as they make in the classroom.

Marine ecosystems

For those challenges that relate to the protection of the environment, the conservation of marine ecosystems, eradication of poverty, and to the development of local communities, we need more interdisciplinarity. But if we cannot obtain that for the reasons illustrated with the image of the two women, we should at least encourage multidisciplinarity, and then try to harmonize policy initiatives.

In any case, we should all strive harder to know each others' images, because it will make us understand where we come from when we argue positions. For that, we must talk across

Since we tend to insist on disciplinary boundaries, we do not do communities and policymakers the service they deserve...

disciplinary boundaries more so than we do today. This is not only possible but also worthwhile. Speaking from my own experience, I have not become a biologist from working with biologists, but doing so, I think, has made me a better sociologist. I can only hope that it has worked in the same way for them.

Since we tend to insist on disciplinary boundaries, we do not do communities and policymakers the service they deserve, because they cannot afford to lock themselves into the tunnel visions of disciplines. They have to confront real dilemmas and make hard choices where they cannot be always sure of consequences. They must, as best as they can, strive to find a balance between the policy implications of contradicting perspectives.

This, I hold, is the essence of governance. Governance is the kind of conduct that requires openmindedness to different perspectives, the willingness to learn from both realworld experience and from analytic thinking. The governance of fisheries needs the alternative images that the disciplines of global academia employ, because they would help them see the choices that they have to make in a sharper light. And that can only be a good thing.

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Ottar Brox

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Chain Dance

www.youtube.com watch?v=wgFa 0JJYM0s

Chain Dance Video

Not So Rosy

The massive expansion of intensive industrial salmon aquaculture into Chilean Patagonia is repeating the crisis that occurred only three years ago in the Chiloe archipelago

almon is among the most popular species of fish consumed in the United States (US), Europe and Japan. Since 1980 the demand for salmon has fuelled a 300 per cent increase in the global production of salmonids, with aquaculture accounting for 60 per cent of the annual production of 1.2 mn tonnes, of which two-thirds come from Norway and Chile.

The salmonid aquaculture industry is one of the principal sources of fish disease in temperate coastal areas. According to an article in the New York Times of 30 July, the infectious salmon anaemia virus (ISA) that ravaged the southern coasts of Chile between 2007 and 2010 was brought in by contaminated eggs from Norway. Two days later, an editorial in the same daily commented that "salmon farming is a problem everywhere", but that the practices of the industry in Chile are both "tragic" and "unsustainable".

The major sanitary crisis in Chilean waters was provoked by the rapid spread of the ISA virus, which occurred after a massive infestation of sea lice (*Caligus sp.*) ecto-parasites in overcrowded salmon cages. That caused the worst environmental, productive and social crisis in the history of the Los Lagos and Aysen regions, leading to the irreversible destruction of the region's sanitary integrity and a 50 per cent decline in production of Atlantic salmon (*Salmo salar*).

The crisis resulted in losses of US\$2,000 mn and 26,000 jobs, most of which were held by women workers in local processing plants that exported mainly to markets in

the United States, Japan, Europe and Brazil.

The ISA virus crisis was the outcome of 20 years of abysmal sanitary and environmental practices in Chile's industrial salmon aquaculture sector. Currently, 19 new viral and bacterial diseases exist in aquatic coastal ecosystems in southern Chile, where industrial monoculture has been introduced. Additionally, the cumulative effects of chemical and organic pollution have led to eutrophication of the region's water

The salmonid aquaculture industry is one of the principal sources of fish disease in temperate coastal areas.

bodies as well as desertification. The chronic presence of toxic blooms of microalgae has had a major impact on public health, on the marine environment and on the productive activities of small-scale fishing communities, whose economy is based on bivalve and shellfish culture.

Three decades of orthodox neoliberal policies in Chile has enabled the salmon industry to expand exponentially between 1990 and 2007, contributing to 36 per cent of global production. As a result of abundant government subsidies, and protection for foreign investments, the industry thrived.

Labour regulations

The other helpful factors were weak environmental, sanitary and labour regulations, abundant and cheap This article is written by **Juan Carlos Cardenas N.** (jcc@ecoceanos.cl) and **Patricio Igor Melillanca** (patricio@ecoceanos.cl) of Centro Ecocéanos, Chile

labour force, direct access to fishmeal and oil production from Chile and Peru, and the presence of large freshwater reserves in the extreme south of Chile for the production of smolts (juvenile salmon) in lakes, rivers and estuaries.

To the above factors must be added the handing over of aquaculture concessions free of charge and in perpetuity along 3,000 km of protected and unpolluted coasts, archipelagoes, fjords and bays in the extreme south.

Before the onset of the mega-crisis in 2007, the annual production of farmed salmonids had reached 660,000 tonnes, valued at US\$2,470 mn. It is estimated that production for the 2011 season will exceed 550,000 tonnes, with exports worth \$3 bn. Along with this will begin the second phase of expansion in an industry that exports 98 per cent of its production.

This scenario is provoking optimistic announcements by large Chilean business consortiums, as well as jubilation amongst lending banks. However, it is also raising concerns in the Fisheries Subsecretariat, given that the objective is to push annual production to 1.5 mn tonnes by 2019, which would be worth \$5 bn. If that target is reached, Chile will displace

Historically, the salmon industry has not been able to grow productively...

Norway as the world's leading producer of farmed salmonids.

Currently, only 10 large companies (which include Norwegian, Spanish and Japanese transnationals) account for 56 per cent of production (by volume) and 57 per cent of the revenue generated.

In the current context of accelerated expansion of production and restructuring of the salmon industry in Chile, various economic groups and fishery conglomerates linked to the fishmeal industry are pushing for access to the 'rosy gold' business. The route for such expansion is through mergers and acquisitions,

especially of those enterprises that could not raise capital on the stock market or which were unable to restructure their debts.

The Brescia group of Peru and a variety of investment firms from the US, Europe and Asia are now seeking to take control of several salmon producing and exporting companies in Chile. Cermaq and Austevoll Seafood ASA of Norway and the Cooke Aquaculture group of Canada are hoping to increase their presence in the Chilean industry, through the purchase of companies that have lost value, or through establishing strategic partnerships.

Historically, the salmon industry has not been able to grow productively in its traditional regions of Los Lagos and Aysen, where the rearing centres already occupy 60 per cent and 40 per cent, respectively, of the coastline. The post-crisis legal framework does not permit new concessions in these regions. Thus, the pristine Magallanes and Antarctica regions have become the natural choices for the government's plans to increase annual production over the next eight years from 6,000 tonnes to 80,000 tonnes—a growth of 1,300 per cent. To achieve this target, the industry has requested 1,600 new concessions, which will increase its presence along the Patagonian coast from 220 to 4,200 ha.

In parallel, the industry is seeking to expand its smolt production centres by taking advantage of the unpolluted Andean rivers and lakes of the Bio Bio, Araucania and Los Rios regions, territories that are claimed by the Mapuche people. This will add a new element to the conflict between the expansion of industrial salmon aquaculture and organizations of artisanal fishermen, indigenous peoples and the local tourism industry.

Civil society

Also contributing to the conflict will be the opposition from civil society organizations and coastal communities in Magallanes who, for over the last four years, have been raising their voices against the expansion of destructive industrial salmon monoculture.

On 10 August 2011, a joint declaration was issued in Oslo, Norway, signed by Andrew Kroglund, Chairman of the Board of the Norwegian Forum for Environment and Development (ForUM), Bård Mikkelsen, Chairman of the Board of Cermag ASA, Lars Haltbrekken, Chirman of the Board of Friends of the Earth Norway and Hans Petter Graver, Head of the Norwegian National Contact Point (NCP) for the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, and Dean and Professor, Department of Private Law, University of Oslo.

The declaration was the result of a mediation process undertaken by the Norwegian NCP in response to a formal complaint presented on 19 June 2009 against Cermaq ASA, claiming that the company had acted in violation of the OECD Guidelines for Multinational Enterprises.

The government Norwegian is the majority shareholder in the multinational company Cermag ASA, which operates in Chile under the name of Mainstream. The complaint lodged with the OECD highlighted that Cermaq ASA had not "adequately considered" in its operations the rights of indigenous peoples in Chile and Canada. In the case of Mainstream in Chile, the charge discrimination against related to women and "unfounded dismissals attempts to prevent organizing of employees to join labour unions."

Throughout the mediation process, the company refuted the charges made by the citizens' organizations. However, in the joint declaration, Cermaq ASA recognized that "the management of Chilean aquaculture sector, including its own activities, were not sustainable prior to the 2007 sanitary crisis". It also confirms the "connection between how aquaculture was managed in Chile and the spread of the fish disease that caused the demise of the Chilean aquaculture industry in 2007".



A protest rally in Puerto Varas, Chile, during a visit by the Norwegian prince and the Trade Minister in January 2008

The transnational Norwegian company indicated the source of the problem: "rapid growth in the industry, combined with a lack of regulation, contributed, and the national authorities did not have adequate regulation of the biological and operational conditions in Chile.

Cermaq ASA affirms that it "has integrated human rights in the company's guidelines for social responsibility and respects human rights in line with OECD Guidelines for Multinational Enterprises Chapter. II, 10-12 and Chapter. IV". In this way, it guarantees "not to infringe the human rights of others and to remedy violations of human rights where they occur both as a result of the company's own operations and in its supply chain".

It also guarantees to "respect indigenous rights in line with the International Labour Organization (ILO) Convention 169 and the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)", through which it undertakes to ensure that its operations in areas with indigenous peoples in Chile, Canada and Norway "will be in accordance with the provisions of these agreements."

Workers rights

It goes on to guarantee that it will respect and promote worker rights in foreign countries as in Norway "as embodied in the eight ILO core conventions of the Declaration of Fundamental Principles and Rights at Work, including the right to freedom of association and collective bargaining."

Finally Cermaq ASA commits itself to the further development of its qualitative and quantitative indicators "to draw on feedback from both internal and external sources, including groups who may be affected by the business."

This corporate *mea culpa* confirms the veracity of the charges made over a decade by citizens', artisanal fishers', coastal communities' and indigenous peoples' organizations, which are still continuing their struggles to stop the abuses and bad practices that accompany the expansion of the transnational salmon aquaculture industry in the south of Chile.

It's important to recall that all the charges made and information provided by citizens' organizations and parliamentarians at the national level and in the Chilean and Norwegian parliaments, as well as in shareholder meetings in Oslo, were systematically rejected, both by the salmon industry and by the governments.

Centro Ecoceanos has emphasized that the joint declaration only has value if the undertakings pronounced in it by Cermaq ASA and the Norwegian government go beyond being mere promises and are transformed into concrete and verifiable actions. This depends on the NCPs of the OECD in Norway and Chile, as well as the Friends of the Earth and ForUM becoming the guarantors of these promises being fulfilled in Chile and Canada. If not, the text of the declaration will not be worth the paper it is written on.

The first challenge for Cermaq ASA will be to act transparently in respecting the rights of Chilean citizens, coastal communities, artisanal fishers, unions, working mothers and the Mapuche community. The key issue is the right of access to information that is factually correct, timely and adequate on how Cermaq ASA behaves, and the standards that it applies to its operations in Chile.

The second challenge concerns the behaviour of Cermaq ASA and its subsidiary, Mainstream, given the industrial salmon sector's ambitions for massive expansion into Chilean Patagonia. This is vital, considering that in November 2010, the illegal practices of a local salmon company caused the first outbreak of the ISA virus in Chile's Magallanes and Antarctic regions, which the National Fisheries Service tried to cover up.

Pressure from citizen's organizations and evidence provided by the local news media showed that the infected rearing centre's production was excessive. stocking densities three times the maximum permitted levels. What more, unauthorized floating incinerators were being used, and massive quantities of infected dead fish dumped in unauthorized urban landfills. It must also be noted that infected salmon was being processed for direct human consumption, both locally and for export.

All this goes to show that the new 'Salmon Farming Industry 2.0' regulatory scheme is only propaganda aimed at public relations, and that the Chilean State is abdicating its role as regulator.

For more

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oecdwatch.org/cases/Case_166
ForUM and Friends of the Earth
Norway vs Cermaq ASA

hugin.info/134455/R/1537756/469546. pdf

Joint Statement by Cermaq ASA, Norwegian Society for the Conservation of Nature/Friends of the Earth Norway and ForUM

www.regjeringen.no/en/sub/styrer-radutvalg/ncp_norway/klagesaker/saker/ cermag_conclusion.html?id=652229

Mediation succeeded: Complaint on salmon farming concluded in new OECD body

A Giant Leap

This is a response to an article on South Africa's fisheries policy, carried in the last issue of SAMUDRA Report

the World Summit on Sustainable Development (WSSD) in 2002, a group of South African small-scale fisher people gathered to discuss fishing policy. While at that time the political impact of this gathering in Johannesburg was minimal—if any at all—it was a crucial gathering in that it triggered an unprecedented civil society process to address small-scale fishing in South Africa. To discuss the 2010 draft small-scale fishing policy adequately, we must give due recognition to the 10 years of civil society action as well as governmental change processes. The article titled "Mere Window Dressing" by Oliver Schultz in the last issue of this journal (SAMUDRA Report No. 59, July 2011) does not examine this history and, therefore, leaves the reader with an incomplete story about the movement towards human-rightsbased fisheries in South Africa.

As a key civil society stakeholder in a 10-year long process of working with fishing communities and lobbying government, we want to present our view on the policy and the process behind it. Before we begin, we must acknowledge that, as civil society, we play a very different role to that of academia. Everything we do concerns the rights of fisher people, which has required that we navigate the complex political and economic environment to find the best possible route to a new fishing policy that, for the first time in South African history, recognizes the rights of smallscale fishing communities. Poverty, violence, and devastation are part of daily life for thousands of fisher people, and the need for change is, therefore, immediate. This reality places a time pressure on civil society that is quite simply not felt by academia, and our only option in contemporary South Africa is to push for the best possible reform, with the knowledge that the fight will continue after the policy is endorsed.

The draft small-scale fishing policy was released for public comments by the government in December 2010 and it is expected to be revised somewhat and endorsed by the minister within the next six months. The draft policy is built on the

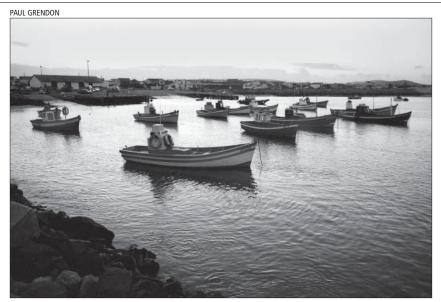
To discuss the 2010 draft small-scale fishing policy adequately, we must give due recognition to the 10 years of civil society action as well.

inclusion of civil society and, in particular, fisher people, with a level of participation that is unprecedented in South African policymaking over the last 10 years. In a democracy as young as South Africa's (democracy was introduced in 1994 after the fall of Apartheid), it is important to acknowledge this as a victory, a victory which gives us hope and belief in an even better future, and galvanizes us in the fight for social, environmental and economic justice in our country.

Fishing policy

The 2002 WSSD took place just after the medium-term fishing policy had been implemented, and, given the injustices of that policy, it naturally became a topic of discussion. With limited knowledge and capacity on

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A scene from Struisbaai Harbour, Western Cape, South Africa. The small-scale fishing sector was left high and dry in the implementation of the long-term fisheries policy

this policy area, we, as civil society, decided to shed more light on the consequences of the policy by hosting a Fisher Peoples' Human Rights Hearing in 2003. Heartbreaking stories filled the hall, and statements like "Our fishermen have always been able to look after our children...but, that main responsibility is now... taken away from us" were heard throughout the two days of the hearing.

Early in 2005, the government released the draft long-term fishing policy that was designed on the of principle individual quota allocations. In the mildest terms, this policy was devastating for the vast majority of the approximately 30,000 small-scale fisher people in the country, and, despite comprehensive inputs from civil society, including the fishing communities themselves, the government stood firm on the basic principles. Up to 90 per cent of fisher people had their rights taken away the moment the minister signed off the long-term policy.

From Johannesburg to the longterm policy, was a time of anger and sorrow in the communities, but also a time when people got together and discussed politics and tactics. Our role was to deepen the analysis and debate around this new policy, together with the fisher people, and, as the nature and consequences of the policy became clearer, so the foundations for action were laid. People wrote letters and took to the streets, approaching the minister for fisheries and senior officials within the department time and again, with no response. For about two years, the government successfully ignored the call from the small-scale fishing sector, which was left high and dry in the implementation of the long-term policy, and only when we took the minister to court was he finally forced to respond. This first interaction with the government, late in 2005, was an exchange of affidavits and meetings in the halls of the equality court.

It would take almost two years of litigation before the minister signed an out-of-court agreement in May 2007, made as an 'order of court' with us, the Artisanal Fishers Association of South Africa (AFASA), and the fishers themselves. The equality court order obliged the government to develop a new national policy specifically for the small-scale fishing sector and to provide 'interim relief' permits to 1,000 of the most destitute fishers until the policy was finalized and implemented. This was yet another turning point as the fisher people—now organized under their own organization, Coastal Links—began to take an active part in a three-year long process of conferences, workshops, and meetings with the government. Coastal Links formed an alliance with AFASA and, together with Masifundise, built a formidable grouping to drive a civil society quest for the new small-scale fishing policy.

The first significant participatory event was a conference hosted by the national Minister of Environmental Affairs in November 2007 with almost 100 participants from the fishing communities of all four coastal provinces. At this crucial event, a task team, with representatives from government, universities and fishing communities from the four coastal provinces, was officially appointed and given the responsibility to develop and propose policy inputs.

Fishing communities

Numerous meetings were held and while it was often a case of "two steps forward and one step back", it was, nevertheless, a process that sensitized officials to the needs and wishes of small-scale fishing communities and thus better equipped the government to address the challenges. It was a period where the fisher peoples' struggle was laced with a delicate co-operation with the government. This proved to be something of a balancing act, and strategies and tactics had to be carefully evaluated and reformulated as ground was alternately gained and lost.

In addition to this participation in the process, many workshops at local community and national levels were hosted by us, and others, to discuss the contents of the new policy. This process helped forge an improved, common understanding on the ingredients of a successful smallscale fishing policy. Coastal Links, with almost 2,000 members in more than 20 fishing communities in the Western and Northern Cape Provinces, together with AFASA, took a strong stand against the current quota and instead proposed system, 'community rights' as a new hybrid system for fishery management. This position was pushed by the Coastal Links leaders who were appointed as part of the national task team, and today the principle of community rights is reflected in the draft policy, as a direct result of the participatory nature of the policy-making process. Other key areas identified by the fisher people and included in the policy relate to ancillary jobs in the fishing sector and control of the marketing of fish products.

In his article, Oliver Schultz narrows the extent of public participation in the policy-making process to a couple of government road show meetings in the Cape Town metropolitan area, and thereby to mention the processes fails highlighted above. Ours is by no means a full description of the process but, without it, the reader might be left with the impression that the contents of the draft policy are out of touch with the needs and wishes of the fisher people, which would be an inaccurate deduction. The voices of the few individuals Oliver Schultz refers to do not carry

the weight and agency of the voice of the Coastal Links and AFASA leaders who represent thousands of fisher people.

Now. from the issue participation, to the challenges of policy implementation. A policy that builds on 'new' management principles requires adaptation and new capacity on all sides as well as a solid implementation plan. In the critique given by Oliver Shultz, he argues that the policy builds on a "flawed conception of community" and, as a result, policy implementation becomes a practical challenge. Shultz's more academic discussion on spatial and social boundaries of a fishing community is in itself flawed as it does not add detail to the different layers and complexity within fishing communities. Furthermore, it is an argument partially based on conversations with a few individuals. In contrast, having advocated for this new policy for years, we have all along been cognisant of the layers and complexity of a community, a point that has, in particular, been carried forward by the community leaders who have been key agents in the entire policy process. The problem is, therefore, not one of a "flawed conception of community", but rather that the layers of complexity in fishing communities across the

A policy that builds on 'new' management principles requires adaptation and new capacity on all sides as well as a solid implementation plan.

country call for a careful approach and a gradual implementation.

This brings us to another important aspect of policy implementation, which Schultz also makes reference to. Will we see a plan for policy implementation and will government have the capacity and resources required to ensure effective implementation? The short answer to these questions is: "We believe so". To find out why, we must, once again, look back. Ten years ago,

Trompie, a Struisbaai netfisher, protesting outside the Department of Agriculture, Forestry and Fisheries offices, demanding his netfish permit

small-scale fisheries was not recognized by the government, a fact reflected in fishery legislation. Only subsistence fishers were recognized. But, since the subsistence economy has more or less vanished in its purest form, the small-scale fishers do not fit into that category. It took 10 years before the minister signed the order of court, which was the first official recognition of the smallscale fishing sector. Since then, progress has been made, and today we have to acknowledge that we have a government with whom we work together in a constructive manner, albeit with relative caution and trepidation. Through this process, we have also succeeded in supporting the government to build its knowledge and capacity, and this is certainly paving the way for both the finalization and the implementation of the new small-scale fishing policy.

In Oliver Schultz's article, these important and deeper reflections are not considered, which allows for the impression that yet another opportunity for a successful development and management of small-scale fisheries has failed. Not so. Rather, it is a moment of a new beginning of practice, reflection and further analysis of small-scale fisheries in South Africa, and it is one of the most positive examples in an African context. While there is still a long way yet to a perfect institutional

framework and governance system for South African small-scale fisheries, we have taken a giant leap towards a human-rights-based fishery system. \$

For more

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icsf.net/icsf2006/uploads/publications/ samudra/pdf/english/issue_59/art04.pdf Fisheries Policy: New Window Dressing, SAMUDRA Report 59, July 2011-09-30

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Trust for Community Outreach and Education

masifundise.org.za/?p=246

Masifundise Development Trust

Green, Blue and Right

The FAO-OECD Expert Meeting on Greening the Economy with Agriculture (GEA) was held during 5-7 September 2011 in Paris, France

n his introductory remarks to the Expert Meeting on Greening the Economy with Agriculture (GEA), jointly organized by the Food and Agriculture Organization of the United Nations (FAO) and the Organization for Economic Development (OECD), Assistant Alexander Muller. Director General, Natural Resources Management and Environment Department, FAO, pointed out that 'green agriculture' is the first step to a 'green economy', and that there is no conflict between sustainable development and the green economy. A green economy, he stressed, integrates the economic, environmental and social pillars of sustainable development.

Referring to the report of the Secretary General on the Objectives and Themes of the United Nations Conference on Sustainable Development, Muller said the main challenge facing humanity now is to sustain the process of poverty eradication and development while shifting gears. Developed countries shrink environmental footprints as fast and as far as possible while sustaining human development achievements. Developing countries should continue to raise their people's living standards while containing increases in their footprints, and recognizing that poverty eradication remains a priority. Muller also briefly touched upon the 'blue economy', which refers to sustainable equitable distribution of ocean resources.

Brice Lalonde, former French ambassador to the UN climate change negotiations, and currently the Executive Co-ordinator of Rio+20, said 50,000 people are expected to

participate in Rio+20, which would be a "round table of the planet". He stressed the importance of developing sustainable systems of production and consumption, and remunerating positive externalities. Rio+20, he pointed out, does not refer to 20 years after Rio but 20 years after 2012. By 2030, he wondered, could there be universal access to energy, could cities be made sustainable, could sustainable development be mainstreamed into UN programmes, and could the United Nations Environment Programme (UNEP) be further strengthened?

The FAO approach to the green economy is to see different sectors in an inter-related manner...

To a question from the representative of the International Collective in Support of Fishworkers (ICSF) on why agriculture is combined with forestry and fisheries, and why the blue economy is not highlighted along with the green economy, Muller clarified that forestry and agriculture are inter-linked, although fisheries are different. The FAO approach to the green economy is to see different sectors in an inter-related manner, he said.

Green economy

Chang-Gil Kim of South Korea said while the 'green economy' focuses more on poverty eradication, 'green growth' focuses on growth in developed countries. The challenge is how to integrate both, he added.

This article is by **Sebastian Mathew** (sebastian1957@gmail.com), Programme Adviser, ICSF Marita Wiggerthale, the representative of OXFAM Germany, said the approach to the green economy should be a rights-based approach. What vulnerable groups think of issues related to access to land and water should be considered. The agro-ecosystem should look at soil, water and biodiversity. Agro-business-led models should not be considered. The model of development itself has to change if we talk about the green economy, she said.

Asad Naqvi of UNEP said the green economy is not a winner for all, and it is important to come to terms with the limits of ecology. Unlike the FAO approach, the UNEP approach to the green economy is to look at different sectors separately. Agriculture was the most multifunctional of all sectors, he said, adding that 90 per cent of the gross domestic product (GDP) contribution of the poor comes from agriculture.

There is no trickle-down of development benefits to the poor, he said. In China, agriculture creates more pollution in waters than industry. It is important to improve productivity of small-scale farms. Naqvi highlighted how four seed companies control 50 per cent of the global commercial seed market, how 10 corporations control 82 per cent of the pesticide business and how 10 corporations control 28 per cent of the global market for processed food.

ICSF welcomed the importance given to small-scale fisheries (SSF) as a low-input system...

Unrich Hoffmann of the United Nations Conference Trade and Development (UNCTAD) pointed out how agriculture contributes between 44 to 57 per cent of emissions of greenhouse gases (methane and nitrous oxide). He highlighted the importance of a paradigm shift and the need to protect grasslands for terrestrial carbon sequestration. In this context, he stressed the importance of conserving soil.

Myrna Cunningham, Chair, the UN Permanent Forum on Indigenous Issues (UNPFII), said 36 per cent of land area in Nicaragua has been under self-governance since 1990. Culture is a fundamental aspect of development, she said, pointing out the importance of collective rights and self-governance over land, territories and resources. Cunningham said respect traditions, ancestors and for future generations is important. sovereignty is important, she added, especially in regard to how food is produced and distributed. In addition, ensuring equitable access, community control over water, seed, fish, and so on, is also important. Respect for human rights, including indigenous rights, is equally important. Cunningham pointed to three incentives that could help the move towards a green economy: (i) valuation of traditional knowledge; (ii) respect for human rights, in particular collective human rights, especially legal security to keep territory, the ability to be informal and to be consulted in decisions; and (iii) respect and valuation of the role of women and inter-generational dialogue.

Responding to the FAO background paper, "Food Availability and Natural Resource Use in a Green Economy Context", ICSF welcomed the importance given to small-scale fisheries (SSF) as a low-input system, and the observation that future growth in fish production should come from enhanced SSF that do not harm ecosystem health, and that respect ecological limits.

ICSF further welcomed the importance attached to capacity and effort reduction, and the observation that bottom trawling is destructive and a high external input system. ICSF supported the proscription of destructive and indiscriminate fishing methods.

Aquaculture

The scarcity scenario predicted for fish resources may not apply

to aquaculture, ICSF pointed out, stressing the importance of promoting herbivorous species in aquaculture that are either free of—or minimally dependent on—fishmeal, unlike carnivorous species such as salmon that are heavily dependent on fishmeal as feed. ICSF highlighted the role that small indigenous fish species can play in nutritional security.

While supporting the role of marine reserves in reversing overfishing pressures and habitat destruction, ICSF said such reserves, instead of being fully protected as proposed, should permit inclusive, low-impact small-scale fisheries and sustainable use of marine living resources.

ICSF fully supported the humanrights approach as proposed by Myrna, and the need to treat traditional knowledge and respect for human rights as incentives for the green economy. ICSF proposed that subsidies to adopt environment-friendly fishing methods and biodegradable gear as well as to introduce fuel-efficient marine engines to propel fishing vessels be considered as incentives for a green economy.

Svetlana Boinceau of the International Union of Food Workers (IUF) said there are about 1.3 bn people employed in agriculture who account for half the global labour force. There are 450 mn wage workers in agriculture, half of them women. The wage workers include 60 per cent of the global population of 132 mn child labourers (children in the age group of 5 to 14 years). Along with construction and mining, agriculture is one of the three most dangerous occupations in the world, she said. There are about 170,000 work-related deaths in agriculture every year, of which 40,000 are singularly due to handling pesticides. Three to four mn workers are exposed to poison. Workers are twice as likely to die in agriculture than in any other sector, Boinceau said. Only 14 countries have so far ratified the Safety and Health in Agriculture Convention, 2001. The right to a living wage should be protected under the green economy, she said.

Gaetan Valoqueren, Senior Adviser to the UN Special Rapporteur on the Right to Food, said it is important to protect the right to food under the green economy, especially the institutional dimensions of the right to food. He said the FAO document should provide concrete examples countries that have made progress in implementing the right to food. In this context, he mentioned the Mahatma Gandhi National Rural Employment Guarantee Act, 2005, and the proposed National Food Security Act as good examples from India. Agrarian reforms are important in the context of ensuring access to land and right to land, he said. Legal security of tenure is important; in this context, anti-eviction laws should be a priority. There should be demarcation of land and territory of indigenous peoples. The consequences of the implementation of the right to food approach should be clarified, he said.

Responding to the background paper "Decent Rural Livelihoods and Rights in a Green Economy and Environment", ICSF pointed out how it does not address the need for strengthening institutions and governance in relation to commonpool resources such as fisheries. ICSF sought greater recognition of collective rights in the management of fisheries such as community-based fisheries management regimes, and cautioned against privatization of fishery resources through the introduction of the individual transferable quota (ITQ) system, as in some marine fisheries.

Teava Iro of the Titikaveka Growers' Association, Cook Islands, said people eat less if they eat more nutritious food. Scientists should look at the prospects of reducing the output of low-nutritious food and of increasing the output of high-nutritious food, he said.

Indigenous people

Harriet Kuhnlein, Nutritionist at the Centre for Indigenous Peoples' Nutrition and Environment, McGill University, Canada, said how Ooligan fish, important in the diet of



50,000 people are expected to participate in Rio+20, the "round table of the planet"

indigenous people of British Colombia as a source of vitamins A and D when fermented, was destroyed by bottom trawling when Ooligan bycatch was discarded. Local food content in diet was as high as 90 per cent in India, as against 20 percent in Germany, Kuhnlein said. She highlighted the importance of consuming less processed food, and less of longdistance food, and more of local food. She pointed out how leftover lunch is thrown away in schools all over the world and how schools should reduce, recycle and compost plate waste. She sought the labelling of food for carbon footprint.

Commenting on the background paper, "Improving Food Systems for Sustainable Diets in a Green Economy", ICSF drew attention to several issues. Firstly, the significance of greater recognition of small indigenous freshwater fish species like mola (Amblypharyngodon mola) in addressing micronutrient malnutrition was raised. Conserving biodiversity was highlighted, especially to protect populations of micronutrient-dense small indigenous species like mola in the wild. The importance of recognizing and documenting traditional knowledge regard to nutritional therapeutic use of traditional food was highlighted.

Secondly, the need to recognize quality associated with the place of origin was raised in regard to small-scale fisheries products. Phu Quoc fish sauce from an island in Vietnam was given as an example where geographical indication (GI) appellation has benefited a product based on anchovy catch from small-scale fisheries.

Thirdly, ICSF pointed out how an ecolabelling scheme run by the Marine Stewardship Council (MSC) hardly helps small-scale fisheries in developing countries, and how only one small-scale fishery from a non-OECD country has benefited so far from the 15-year old MSC ecolabel. ICSF sought greater recognition of sustainable fishing methods and low-carbon-footprint fishing techniques to act as incentives, along with ecolabelling schemes

that basically reward well-managed fisheries.

Fourthly, ICSF sought to factor in reducing food miles, especially in relation to distant-water fishing operations and in relation to transoceanic multiple movements of high-value fish such as bluefin tuna for *sashimi* and *sushi*.

In the Concluding Session, Nadia Scialabba of FAO said the organization plans to treat agriculture, forestry and fisheries together in the background The papers. revised version incorporating comments from this Meeting, will be submitted to the FAO Council's 143rd Session in November-December 2011, and to the United Nations Department of Economic and Social Affairs (UN-DESA) by I November 2011. The papers would be made less prescriptive, and more technical. The FAO Council will be expected to come up with policy recommendations, Scialabba said. Trade-offs will be minimized and synergy will be promoted. The gender dimension will be strengthened. The focus of the papers will be on developing countries. Scialabba also mentioned recent inputs that FAO has made to the blue economy initiative at the 14th Round Table Meeting for Pacific Islands Countries in Wellington, New Zealand, during 22 to 26 August 2011. ICSF, along with the African Union, further reiterated importance of sufficiently recognizing the role of fisheries in the background documents.

For more

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www.fao.org/rio20/fao-rio-20/gea/en/

FAO/OECD Expert Meeting on Greening the Economy with Agriculture, Paris, France

www.uncsd2012.org/rio20/
United Nations Conference on
Sustainable Development

Maria vs Elinor

The approach of EU Fisheries Commissioner Maria Damanaki to sustainable fisheries management is in stark opposition to that of economist Elinor Ostrom

or quite a long time now, we in the non-governmental organization Collective Pêche et Développement have been convinced that the fishery crisis cannot be resolved by excluding fishermen and by dealing with fish alone. More than a crisis in the resource itself, it is a crisis linked to fisheries governance, and the sharing of common resources. To address this complex problem, we must find ways to save fish, fishermen and ecosystems together. The other principle that is fundamental to our approach to fisheries management is to regard fishing as a gathering/ harvesting activity and not as a production activity. This calls into based question approaches on industrial production models, and governance by consumers. It is not fishing that has to adapt to consuming, but consumers who have to adapt to the reality of fishing, which is evolutionary and complex.

One of the pioneers sustainable development, an Indian environmentalist, the late Agarwal, described his vision of sustainability in the second issue (dated 15 June 1992) of Down to Earth, a magazine he created during the Earth Summit in Rio in June 1992: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

This is a definition offered by the famous World Commission on Environment and Development in its report "Our Common Future". Economists have also provided a definition of sustainable development as being an economic process in which the quantity and quality of our stocks of natural resources (like forests) and the integrity of biogeochemical cycles (like climate) are sustained and passed on to the future generations unimpaired. In other words, there is no depreciation in the world's 'natural capital', to borrow a concept from financial accounting.

But what is the operational substance behind such definitions? Who is going to ensure the rights of future generations when, given the highly divided world we live in, a

It is not fishing that has to adapt to consuming, but consumers have to adapt to the reality of fishing...

large proportion of even the present generation cannot meet all its needs. Given such a social and political context, the above definitions also fail to say which future generations' needs are being sought to be protected and preserved. Are we talking only of the future generations of the rich or also of the poor? These definitions are all, at best, rhetorical and woolly.

Sustainable development

Eminent Indian economist, Sukhamoy Chakravorty, in a lecture that he delivered to the Centre for Science and Environment a few weeks before his demise, had pointed out that the success of the phrase 'sustainable development' lies in the fact that it says nothing precise and, therefore, means anything to anybody. For a logging company, it

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can mean sustained projects; for an environmental economist, it can mean sustained stocks of natural forests; for a social ecologist, it can mean sustained use of the forest; and, for an environmentalist, it can mean a clean heritage for our children. But surely confusion cannot be more productive than clarity.

More than these pious definitions, it is important to understand the political content of sustainable development. Sustainability can never be absolute. A society which learns faster from its mistakes and rectifies its behaviour will invariably be more sustainable than another society which takes a longer time. And a society which fails to incorporate the lessons of its mistakes into its behaviour patterns even after the point of irreversibility has been reached, is obviously a society which is pursuing a totally unsustainable process of development. Learning from one's mistakes is crucial to the process of sustainable development because society-today, tomorrow ever in the future-can claim to be so knowledgeable that it will always manage and use its natural resources in a perfectly ecologically sound manner. That will always

Sustainability arises not out of mushy-headed concepts but out of hard political issues...

be a near impossibility. Changing social, political, cultural, technological conditions ecological exert new pressures on the natural resource base, and the possibility of its misuse or overuse will always remain. It can, therefore, be argued that sustainable development will be the outcome of a political order in which a society is so structured that it will learn fast from its mistakes in the use of its natural resources, and rapidly rectify its human-nature relationships accordance with the knowledge it has gained.

The important question, therefore, is: which political order will lead to conditions which encourage a society to learn fast from its mistakes in the use of its natural resources? It is obvious that such a society will be one in which decision-making is largely the prerogative of those who will also suffer the consequences of those decisions. If decisions are taken by a distant national bureaucracy or a transnational corporation to use a particular resource, and a local community living next to that resource is suffering in the process, it is unlikely that the decisionmakers will change their decisions fast. But if the resource is being overused or misused by a local community which is dependent on it for its survival, and cannot easily relocate itself to another environment (in other words, it is a settled community rather than a frontier community), the declining productivity of the resource would sooner or later force the local community to change its ways.

Sustainability, therefore, arises not out of mushy-headed concepts like care for future generations but out of hard political issues like, one, patterns of resource control, and, two, levels of democracy within the decision-making group. The greater the participation, openness and democracy within the members of the decision-making group, the greater will be the chances of those who are suffering within the decision-making group—whether the decision is taken by a community or a nation as whole—to get a fair hearing and decisions changed accordingly.

Sustainability thus demands the creation of a political order in which, firstly, control of natural resources rests, to the maximum extent possible, with local communities who are dependent on those resources; and, secondly, decisionmaking within the community is as participatory, open and democratic as possible. The more this happens, the more we will move towards sustainable development.

Democracy

The bedrock of sustainable development is composed of freedom and democracy—a system of

governance which gives freedom to a community or a nation, within an universally accepted social framework that prescribes penalties for harming another community or nation, to control the use and management of its natural resources so that it can determine its own way of economic and social development. Each society will experiment and learn from its own mistakes. Sustainable development cannot be thrust upon by an external agent-whether it is the World Bank, the United Nations or the forestry department of a government-simply because it believes, at any point in time, that it has learnt all the lessons there are to learn. That will surely be a process towards unsustainable development.

Reforming the Common Fisheries Policy (CFP) of the European Union (EU) in the ways proposed by Maria Damanaki, the EU Commisioner for Maritime Affairs and Fisheries, leads us far away from such an approach to sustainability. The vision of Anil Agarwal, based on the analysis of the management of common resources by Indian communities, is supported by the study of the 'governance of the commons', developed by Elinor Ostrom, winner of the 2009 Nobel Prize in Economics, which is also based on case studies of fisheries management by fishing communities. In contrast, Damanaki is committed to deepening privatization and liberalization of fishing, on the one hand, and, on the other, to a policy based on strengthening the so-called 'scientific' approach to sustainability defined as an absolute to be reached and respected whatever the social costmaximum sustainable yield (MSY). Who would not agree to such a goal? But what it is, when, and how to achieve it still has to be defined.

To set a deadline for achieving MSY in 2015 is simply absurd. It can take decades to restore overfished stocks. One can also question the relevance of an MSY defined by stocks or species. There is an extreme natural variability of many stocks, and complex interactions between different species in an ecosystem. For example, what is the MSY of a herring



An immigrant fisherman in Oban, Scotland. There is widespread use of underpaid immigrant workers in developed countries like Canada, Iceland and New Zealand

fishery off Newfoundland, knowing that this species has proliferated since the collapse of the cod, and the cod stock recovery is slowed by the predation of herring on cod fry or alevins? Moreover, hyperprotected seals have also proliferated, reaching levels of nearly 10 mn, and they consume large quantities of cod and other fish. Predation by cetaceans is well above that of fishing, but the total responsibility for the state of resources is always blamed on fishermen. What meaning has an MSY in a context of generalized landbased pollution that modifies the environment to the point of anoxia, the total absence of life? Fishing and fishermen must take their share of responsibility for the state of resources, but there are many other factors that influence the mortality of fish, such as pollution, climate change, and mismanagement from scientists and fisheries managers.

Management by quotas

For Damanaki, the aim is to achieve this mythical MSY by relying primarily on management by total allowable catches (TACs) and individual transferable quotas (ITQs), as determined by scientists. The approach to management by quotas is far from being the only possible one, and it does not provide any greater



A gillnetter in Lorient, France. Quota management and privatization reinforce the power of financial institutions on fishing

guarantees for sound management than other system. It may be appropriate for very specific, wellknown and well-monitored stocks, which are the subject of targeted fishing. In contrast, it is not an appropriate management tool for multispecies fisheries, where various evolutionary measures allow for greater flexibility. Some scientists also consider that the management by quotas is management of virtual fish that leads almost inevitably to the privatization and increased costs of fishing, encouraging overfishing. The management of cod quotas in Iceland has led to the inexorable decline of landings, from 400,000 tonnes per year to less than 150,000 tonnes in 2010. Paradoxically, fishing and stocks fared better in the absence of management. Gradually, quota privatization management and reinforce the power of financial institutions on fishing, capital becomes concentrated, the number of vessels gets reduced, and the cost of entry into the fishery increases. More expensive quotas will lead to more intensive fishing.

According to Norwegian and Canadian researchers who have observed the evolution of fishing in their country, "the virtual population analysis, the product of fisheries science, turned it into something manageable through quotas. The result is the assertion of financial

logic which reduces the sustainability of the system, which was yet to create a sustainable fishery. The action of all stakeholders is oriented in a certain direction, so that companies are more producers of profits than producers of fish, work and social benefits."

The social impact of the policy of ITQs is very negative, indeed. To pay for investments, we must lower the cost of labour-hence, the widespread use of underpaid immigrants (in Canada, Iceland, New Zealand). The aim of ITQs is not primarily about the management of the resource, but rather about the quest for maximum profitability. It is also possible to aim for the preservation of the maximum number of jobs while preserving the resource by promoting artisanal fisheries in their diversity. Sociologists such as Dutch Rob van Ginkel have shown that artisanal fishermen have much more resilience than fishing companies of the industrial type, because beyond making a living out of it, their activity is a way of life that they cling to with pride. Instead, privatization leads to the dismantling of all structures and institutions developed by fishermen for the operation of their business and their sustainability. With ITOs, there is no need for producer organizations or local committees; all we need are quota-owning enterprises, run by financiers and monitored by scientists who determine the quotas—an industrial model that is not adapted to gathering but that constantly has to adapt to natural hazards, of very different scales.

Ecosystem diversity

The diversity of resources and ecosystems requires diversity in the organization of the fishing activity itself, as evidenced by the history and culture of fishing communities. Following a comprehensive survey of fishermen and fishing communities of Maine, United States (US), on their vision of the demersal fishery by the NGO Northwest Atlantic Marine Alliance (NAMA), the first aspect that was emphasized was the need to preserve the diversity of boats and fishing gear to ensure the future.

The reform proposed by Maria Damanaki is founded on one conviction: the crisis of European fisheries is mainly due to overfishing. Consequently, the avowed objective of the reform is to eliminate between two-thirds and half of the fishermen and boats to quickly reach the mythical MSY. The setting up of ITQs, coupled with a severe restriction of the TAC, is the cheapest way to do this. The sale or lease of their quotas by the least powerful (artisanal fishermen with only one boat) to the more powerful groups will enable the sector to finance the elimination of fishermen without public funding. The free allocation of quotas will be profitable for such groups, with the prospect of a good future income.

No one can deny that there has been overinvestment in fishing. with massive subsidies, in particular after the establishment of exclusive economic zones (EEZs) in the 1970s and 1980s. This policy continued in France until the early 2000s in some activities (tuna seiners, deep-sea trawlers) but since the 1990s, the number of boats has collapsed, ports have emptied, and some of them have even disappeared. In Lorient, France, in 1972, there were over 500 boats, including many industrial trawlers over 30 m in length. There are now about a hundred, mostly artisanal boats of less than 20 m, for the most part non-trawlers. Even considering their improved catching abilities, the problem is no longer one of overinvestment, especially if one looks to the future, and takes account of the age of vessels and skippers; it is probably underinvestment that no longer allows adaptation to the new demands of fishing. There may be overinvestment in some sectors in Europe; it is difficult to adapt capacity to continuously fluctuating stocks (like anchovies), but there is a trend towards improvement of resources in several fishing areas and for several stocks, a sign that the generalized perception of overfishing is now outdated. Adaptations of effort should help to further improvements. The urgency seems rather to preserve existing capacities in capital and, among fishworkers, to ensure the survival of the activity.

In the US, scientists agree that overfishing is virtually over, but managers continue—on behalf of 'conservation'—to impose measures SO drastic that the landings sometimes far below are the possibilities, to the point some consider that US is rather in a situation of underfishing. At the same time, fishermen have disappeared from the docks, replaced by big fishing companies, second seaside homes and recreational fishermen. The supermarket shelves are full of fish and shrimp imports, while the remaining fishermen struggle to sell their products at a decent price.

Recreational fishermen in the US, Canada, and Great Britain are lobbying to reserve some fisheries and to buy additional quotas. The concern for conservation in the extreme, with the generalization of no-take zones, helps accelerate the elimination of artisanal fishermen in the North as well as in the South. The end of overfishing is a Pyrrhic victory. Is this what we want in Europe too?

The profoundly liberal orientation of the proposed reform to the CFP leads to various gaps in the proposals. Social issues are hardly mentioned,

The concern for conservation in the extreme helps accelerate the elimination of artisanal fishermen...

and neither are the problems related to market liberalization. First, there is a bias in favour of reducing the number of fishermen, a goal shared with many environmental NGOs (in Sweden, considered a model by many environmentalists, where due to their pressure, the number of fishermen has been brutally reduced by a factor of three). While this is a widely shared priority, in many

countries, there is much concern over the recruitment of new fishermen. This requires encouraging immigration (sometimes illegal) of fishermen from the South who will provide labour for industrial boats, a process already under way in several countries like Scotland and Spain. There is no reflection in the reform on this issue, despite the major human and economic consequences. This helps to destabilize the market to the benefit

The protection of small-scale fishing can only be possible if pressure on coastal areas is controlled...

of shipowners who use the cheap labour, which is often overexploited.

The fishermen's wives have organized themselves to make their voices heard, but their status is far from being recognized everywhere, and the CFP reform is silent on this issue. The only proposal with a social aspect concerns small-scale fishing that could escape ITQs, but there is no clear guarantee to preserve and develop this sector.

The protection of small-scale fishing can only be possible if pressure on coastal areas is controlled, pressure which may be due to the activities of the fishermen themselves, or from the growth of non-commercial fishing. A narrow vision of small-scale fishing, which Damanaki defines as that which employs vessels less than 12 m in length and that uses fixed gear, may lead to the displacement of the bulk of activities by vessels considered as industrial beyond 12 miles, when artisanal fishermen have exploited the whole EEZ zone for centuries. Denying the artisanal character of coastal and offshore fishing calls into question the traditional culture of communities.

The second major impasse is on market liberalization. This certainly satisfies the companies importing seafood products, which control a dynamic and profitable industry. But how do you implement resource management measures without

considering the question of markets? There are many cases where resources are abundant and well-managed, but where it is difficult to find markets offering satisfactory prices because of competition within the EU, or import competition from countries outside the EU. Hake, langoustines, scallops and anchovies are important resources that regularly experience problems in marketing. A massive influx of shrimp or pangas can destabilize markets for fresh fish in many countries. In the name of liberalization, no safeguard measure is provided to protect local production.

It is difficult to mobilize fishermen to set up binding management measures if there are no economic benefits, or worse, if the proper management of the stock leads to a collapse in prices. Ecolabels do not in the least guarantee fair prices. We must, therefore, change our view of the crisis, with its focus only on the resource, to include a broader, more inclusive vision that encompasses a wider set of issues.

In contrast to the liberal approach of Damanaki and all the supporters of the "tragedy of the commons", Elinor Ostrom proposes to strengthen self-organization of fishing communities. For her, this organization is the best way to manage resources in a complex and uncertain environment. She does not claim this approach could be applied everywhere, nor that it guarantees success, but it summarizes the results of her research work, defining seven principles for strong institutions able to manage common resources, plus an eighth one for more complex cases.

Community-based management

The relevance of this approach is confirmed by various studies on community-based management fisheries. In 1995, Evelyn Pinkerton and Martin Weinstein published a study on examples of good by management communities. More recently, the journal Nature published the results of a survey of 130 fisheries in 44 countries. In 65 per cent of the cases studied, community based management is efficient,

and in 40 per cent, very effective. These studies cover all types of fisheries. One of the co-authors, Ray Hilborn, had previously shown, in another study in 2009, that the process of improvement of fisheries management and fishing practices was being undertaken across the globe.

All these recent investigations contradict the doom announced by many scientists and NGOs that rely on local examples or previous situations that have changed, so as to promote their objectives and their ideas about the inability of fishermen to manage the resources.

In the management systems implemented in France-such as the Mediterranean prud'hommies, scallop fishery of the Bay of Saint Brieuc, the anchovy fishery in the Bay of Biscay and the langoustine fishery in the same gulf-one can easily recognize the eight principles developed by Elinor Ostrom for institutions that manage common resources. They show that we can implement such systems in times of crisis, for all types of fisheries, even in a very conflicting context. At the end of the 1960s, with the first signs of exhaustion of resources in the Bay of Biscay, some fishermen, with the help of scientists, had already proposed measures such as setting up a no-take zone. For lack of cohesion and sufficient consensus, the project was abandoned and external decisions were imposed on the fishermen, without any involvement their part.

They reacted in a context of serious crisis when they proposed to engage in a process towards selectivity. The situations of crises are favourable to the emergence of solutions initiated by the fishermen themselves, but need catalysts and facilitators. The steps are not always successful, but if the collective dynamic is preserved and sustained, new solutions may emerge. These processes may be slow, chaotic and often require time and strong mobilization. We should also remember that it is the fishermen themselves who supported the project of the Iroise Marine Park and that the process has lasted for 20 years.

In the Mediterranean, the fishermen have set up no-take zones, but they were not heard when the Ministry of the Environment imposed on them an immense coastal reserve that takes away from them fishing areas that are essential to their activity.

In France, in Europe and all over the world, there are many examples of good practices and positive changes initiated by fishing communities themselves. By relying on these initiatives and by acknowledging their capacity to analyze the situations, we can hope to build sustainable fisheries.

It is also up to consumers to support these efforts, rather than follow the guides and edicts of NGOs that mainly benefit supermarket groups. We must learn again from fishermen. While mistakes have clearly been made, their capacity to modify their practices should be recognized. The history of fisheries is a history of repeated crises to which fishermen have proved capable of finding answers.

Today, with powerful technology, errors lead more quickly to disasters, but there are still possibilities to react as long as pollution has not destroyed the capacities of plankton production, even if the ecosystem that is rebuilt is not exactly the same as it was in the past. The sea, like land, is a territory exploited and transformed by human activity. There is no simple answer, readymade, universal or absolute in time.

Elinor Ostrom and Anil Agarwal, in two different worlds, drawing on various examples of common resources, have reached the same conclusions that totally contradict the proposals of Maria Damanaki. It's up to us to take advantage of this.

For more

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ec.europa.eu/fisheries/reform/

Reform of the Common Fisheries Policy

www.youtube.com/ watch?v=ByXM47Ri1Kc

Sustainable Development and the Tragedy of the Commons

dlc.dlib.indiana.edu/dlc/

Digital Library of the Commons

A Bottom-up, Pro-fisher Policy

A recent workshop and symposium in Kolkata, India, highlighted issues and concerns in the run-up to the proposed international guidelines on marine and inland small-scale fisheries

National Workshop and Symposium on Sustainable Small-scale Fisheries, organized by the National Fishworkers' Forum (NFF), in collaboration with the International Collective in Support of Fishworkers (ICSF), was held in Kolkata, India, between 19 and 21 September 2011, to draw attention to fishery and non-fishery threats facing

Small-scale fisheries are more equitable and sustainable, and are part of the culture of coastal and inland communities, besides being a way of life.

inland and marine small-scale fishing communities and to contribute to the proposed international guidelines on marine and inland small-scale fisheries being developed by the Food and Agriculture Organization of the United Nations (FAO).

Matanhy Saldanha, Chairperson, welcomed the participants and said that this was the first time NFF was inviting representatives of inland fisheries to one of its meetings. Speaking at the workshop, Madan Mitra, the Minister of State for Fisheries, West Bengal, spoke of plans being formulated by the State government to support fisheries. He invited two representatives from the workshop to present the workshop proposals at a State-level meeting on fisheries. Pradip Chatterjee, Secretary, NFF then read out a message of support and solidarity from an eminent Bengali author, Mahasweta Devi.

Introducing the workshop, Chandrika Sharma, Executive Secretary, ICSF. said small-scale fisheries (SSF) mainly contribute towards direct human consumption, and are known for seasonality of operations, and low energy use. Small-scale fisheries are equitable and sustainable, she said, and are part of the culture of coastal and inland communities, besides being a way of life. Women often are an integral part of small-scale fish processing and marketing, she pointed out. There is, however, need to be clear on what constitutes small-scale fisheries, she stressed. The workshop, she hoped, could develop proposals on policy and action needed to support inland and marine smallscale fisheries at the local and national levels.

Sharma provided brief background to the decision of FAO to develop voluntary guidelines on sustainable small-scale (VG-SSF). Civil society groups across the world had mobilized prior to, and around, the FAO conference "Securing Sustainable scale Fisheries: Bringing Together Responsible Fisheries and Social Development", in October 2008, in Bangkok, seeking greater support for small-scale fisheries and, specifically, for an international instrument on SSF. Following FAO's subsequent decision to develop such an instrument, civil society organizations had formed a joint co-ordination group.

National workshops

National workshops were being organized in Asia, Africa, Central America, Latin America, Oceania and Europe during the period 2011-2012. The output of these workshops

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will be synthesized, consolidated and used to influence the content of the VG-SSF, Sharma said. The current workshop is the first in the series, she observed.

Presentations from inland fisheries groups followed in the next session of the meeting, chaired by V Vivekanandan, a Member of ICSF. Sriram, an inland fisherman from Tikamgarh district, Madhya Pradesh, spoke about fishing and fish farming in leased irrigation tanks, originally built by the Chandela dynasty in the 10th century AD. The traditional fishers got organized to challenge a 1996 provincial policy defining anyone who fished as a 'fisherman'; they had the support of a local nongovernmental organization (NGO), Vikalp. They wanted only traditional fishers to be legally recognized to fish in inland water bodies. After a struggle lasting nearly ten years, the fishers got their demand met by the provincial government in 2008. The inland fisheries policy of Madhya Pradesh is now based on the recommendations of inland fishers. Likewise, the lease amount is also fixed in consultation with fishers. Sriram sought a national campaign to address issues such as rights of traditional inland fishers, enhancing fish stocks in inland waters, and increasing budget allocations for inland fisheries development. He proposed setting up a national network of those working in inland fisheries.

Three types of inland fisheries and aquaculture operations were presented from West Bengal to highlight the rights demanded by, or denied to, inland fishing communities. Soren from the Santhal community of Birbhum district talked about a campaign to stop destructive stone quarrying, and about stocking fingerlings in abandoned khadans (stone quarries), managed and fished by women's groups. There are many illegal quarries in the region, which tribal communities are trying to convert into fish ponds, and get their rights secured to fish in them, he said. Gobinda Das from the Sunderbans narrated problems encountered in fishing in the vicinity of a tiger reserve (a protected area), and how the community is constantly under the threat of fishing artefacts being confiscated by the West Bengal Forest Department. He sought the implementation of the Forest Rights Act, which recognizes the right to livelihood of local communities, including in national parks, reserves and sanctuaries. Beg, an employee of the Mudiali fisheries co-operative, talked about how large quantities of industrial and domestic waste water of Kolkata are being recycled to successfully rear different carp species. Although their co-operative is a good example of nutrient recycling, low-impact aquaculture and lowexternal-input sewage/fish system combining the need to increase fish production by decreasing pollution, it still operates under the threat of eviction by the Kolkata Port Trust Authority, which owns the land where the fish-rearing activities are located.

Suman Singh from Sakhi, an NGO in Bihar, narrated the struggle waged by women of traditional fishing communities for fishing rights over ponds and water bodies. Women of traditional fishing communities are now organized into self-help groups and co-operatives, and are undertaking fishing in ponds and tanks in northern Bihar, employing local material and local indigenous knowledge. In spite of the difficulty in getting recognition



Participants at the group discussions reflected on key issues of concern to their lives and livelihoods, and also made specific proposals to address them

for women's right to fish, 50 per cent of the ponds in Bihar are now being allocated to women for fishing. Since 2010, a new inland fisheries policy has been implemented in Bihar. Singh drew attention to the extremely poor socioeconomic status of traditional fishing communities in Bihar, and the high rate of illiteracy in the State. With girls often getting married at a very young age, the situation of women is even more precarious. Urgent attention is needed to improve the socioeconomic situation of fishing communities, she said. Singh welcomed the proposal to form a national network. Manju Devi, a landless fisherwoman from Bihar, said she and her husband had received a pond on a ten-year lease to undertake fish farming; this, she added, is an illustration of how fish ponds on lease can be an effective tool for redressing the poverty of landless people.

Prakash Malgave of the Vidarbha Federation of Fishermen's Co-operatives, Maharashtra,

How to define small-scale fisheries and small-scale fishers in the Indian context was a topic hotly debated...

highlighted the basic contradiction between rearing fish in irrigation tanks and agriculture. While the farmers are keen to take the water out, the fishers are interested in keeping the water in the tank. Fishermen's co-operatives have to pay the full lease amount to the zilla parishad even if there is no water in the irrigation tank, he said. Fishing co-operatives have water to undertake fish culture only during the months of July to September—about 100 days in a year. Fishers have to seek other forms of livelihood for the rest of the year. Instead of granting subsidies for construction of fishing vessels and setting up fish-processing facilities, subsidies should be granted for water conservation in rivers, tanks and ponds, as well as for fish seed

production, he said. Subsidies should be extended for the conservation of natural seed production areas. The rights of inland fishers are not recorded anywhere. The provincial government should properly identify and record the historic rights of inland fishers. A comprehensive policy on inland fisheries is needed, Malgave concluded.

Rao Raja Srikakulam, from Andhra Pradesh, described the campaign undertaken by local fishing communities against the location of a power plant in the productive wetlands that have been their traditional fishing grounds. fishermen of Chilika Lake of Orissathe largest lagoon in India—described the negative impact of illegal prawn farms that had come up in the lagoon, an issue they have been agitating against for the past couple of decades, including through legal means. Even as many of the farms continue to operate illegally, the opening of a new outlet in the lake has affected the water exchange and productivity of the lagoon. The livelihoods of local fishing communities have been badly affected, and they have even been forced to migrate to work on board multi-day fishing vessels in Gujarat.

On the second day of the meeting, participants were divided into three groups. While two of the groups comprised participants from marine fisheries, one group focused on inland fisheries. Participants were asked to reflect on key issues of concern to their lives and livelihood, as well as to make specific proposals to address these issues. They were also expected to reflect on how small-scale fisheries can be defined or characterized in the Indian context. The discussions in all the groups were extremely animated and lively. The resulting statement from the workshop (see box...) is based on the reports of the working groups.

Hotly debated topic

How to define small-scale fisheries and small-scale fishers in the Indian context was a topic hotly debated in one of the marine fisheries groups. According to fishers of southern Maharashtra, traditional fishing employing non-

mechanized and non-motorized fishing craft within 10 fathoms from the shoreline should be considered small-scale fishing. For mechanized fishing vessel owners in Karnataka, small-scale fishing would include only vessels with engines up to 10 hp, or without engines. Mumbai fishers said non-mechanized vessels or those with engines up to 32 hp undertaking any territorial-water fishing operations other than trawling could be considered small-scale fishing vessels. For the Tamil Nadu fishers, all fishing vessels up to 37 hp undertaking fishing operations, except trawling and purse-seining in territorial waters, could be considered small-scale. Small-scale fishers would include owner-operators of the above categories, workers engaged in fishing operations in these vessels, and allied workers and processing workers, especially women. It was agreed to consider non-trawl 20 hp fishing vessels below 20m in length, with manually operated gear, especially with no mechanized towing and hauling power, and whose owners regularly go out to sea, as small-scale fishing in the national context. It was also agreed that small-scale fishers in India would include: owneroperators from fishing communities, and workers on board, and allied small-scale fishing, including resident and migrant workers as well as women fish processing workers. Traditional fisheries can be divided traditional small-scale and traditional large-scale, was suggested; the latter would fish in waters beyond the territorial limits. The traditional large-scale should be licensed to fish in the exclusive economic zone (EEZ) and the Central government should facilitate this, it was held.

On fisheries subsidies, the group was of the view that these should be discontinued for building new fishing vessels. It was proposed that tax rebates on diesel fuel for purse-seiners and trawlers should be withdrawn considering their destructive impact on fishery resources. The group debated, inconclusively, whether or not it is better to consider a one-time



Madan Mitra, the Honourable Minister of State for Fisheries, Government of West Bengal, addressing the Inaugural Session of the national workshop on small-scale fisheries

subsidy to shift to more fuel-efficient engines, instead of continuing with the current regime of recurring fuel subsidies. The group also discussed the desirability of re-targeting existing fuel subsidies towards better health and education programmes for fishing communities.

Discussing the equity dimension of ownership, the group was of the view that each fishing family should not own more than one or two vessels. It is ideal to restrict the number of fishing vessels to one per ration card (a card issued by the provincial government for a family to obtain food or other essential commodities, which is treated like a family identity card in India). It was also suggested that community consent should be obtained before registering new fishing vessels.

While discussing bottom-up processes for fisheries management, several questions were raised for consideration, such as how far self-regulation is effective; how far existing traditional arrangements could be useful; the relevance of traditional knowledge in a fast-changing fishery scenario; and the role of government in fisheries management. The group was keen that the government should have an oversight role in all fisheriesmanagement arrangements.

In the second marine group, which included the fishworkers' groups from India's eastern seaboard, attention

THE KOLKATA STATEMENT

National Workshop on Sustainable Small-scale Fisheries: Towards FAO Guidelines on Marine & Inland Small-scale Fisheries

Organized by the National Fishworkers' Forum (NFF) in collaboration with the International Collective in Support of Fishworkers (ICSF)

19 – 21 September 2011 Kolkata, India

We, 62 participants representing the inland and marine fishing communities, fishworker organizations, and non-governmental organizations, having gathered at the National Workshop on Sustainable Small-scale Fisheries: Towards FAO Guidelines on Marine and Inland Small-scale Fisheries, from 19 to 21 September 2011 in Kolkata, West Bengal, India;

Welcoming the decision of the 29th Session of the Committee on Fisheries (COFI) of the Food and Agriculture Organization (FAO) of the United Nations to develop a set of voluntary guidelines addressing both inland and marine small-scale fisheries that would draw on relevant existing instruments, and would complement the FAO Code of Conduct for Responsible Fisheries;

Noting that about 14 million people are directly dependent on fisheries in India for their lives and livelihoods, and that the vast majority of them are dependent on small-scale fisheries;

Recognizing that fishing has a long tradition in India, and that social development issues are common to all fishers from traditional fishing communities;

Further noting that small-scale inland and marine fisheries provide employment, income and nutritional security, especially to the poor;

Drawing attention to the critical role played by women within fisheries and fishing communities and the need for specific focus on supporting and empowering women;

Call upon the Government of India, the States, the Union Territories, and the *panchayats*, as appropriate, to address our concerns and to recognize and defend the rights of small-scale fishing communities, as mentioned below:

Small-scale Fisheries

1. In the Indian inland sector, both freshwater capture fisheries and sustainable forms of culture-based capture fisheries, primarily dependent on indigenous species, are small-scale fisheries for us. In the Indian marine fisheries sector, however, only fishing operations by vessels below 20m length that do not operate trawl, employ no mechanized towing or hauling power, where owners are full-time fishers and where fishing gear is manually operated, are considered small-scale fishing operations by us. Small-scale fishers would include: owner-operators from traditional fishing communities, fishworkers, allied workers in the above fishing operations, as well as women engaged in post-harvest activities.

Resource Management

- Respect, protect and secure the rights of traditional fishing communities to fishing grounds and resources, considering the importance of fishery resources to their life, culture and livelihood.
- Recognize and protect the traditional rights of small-scale fishing communities to fish, including in national parks and sanctuaries. The provisions of the Forest Rights Act, 2006, and those of the Wildlife (Protection) Amendment Act, 2006, that protect the rights and occupational interests of traditional fishing communities should be implemented in this context.
- Facilitate bottom-up processes for managing marine and inland fisheries by revitalizing traditional institutions and by employing the traditional knowledge of fishers, within an appropriate policy and legal framework.
- 5. Make appropriate arrangements to facilitate utilization of water bodies such as ponds, lakes, wetlands, reservoirs and canals for the purpose of fishing.
- 6. Develop a uniform inland fisheries policy through a participatory process.
- 7. Protect or grant the right to fish, and to manage fisheries, in inland public water bodies to traditional inland fishing communities.
- 8. Vest fishing communities with the right to manage resources, including in national parks and sanctuaries.
- Implement the marine fishing regulation act (MFRA). The MFRA and related instruments should be amended to facilitate participatory management of fishery resources.
- Adopt measures to phase out bottom trawling from territorial waters over a period of five years, considering its negative impact on marine ecology, biodiversity and the distribution of marine fishery resources.
- Promote selective and location-specific fishing gear. Prohibit destructive fishing gear such as purse-seine and fine-meshed gear in shrimp seed collection, considering their negative impact on biodiversity.
- 12. Prohibit the construction of new trawlers and purse-seiners under the National Co-operative Development Corporation (NCDC) schemes for fisheries development, with immediate effect.
- Restrict the ownership of fishing vessels to one vessel per fishing family. Community-based organizations may

- be involved in regulating the number of fishing vessels at the local level. Community consent may be taken before registering a new fishing vessel.
- 14. Cancel fishing vessels under the Letter of Permission (LOP) facility and promote vessels fully owned and operated by Indian fishing communities that have the capacity to safely harvest fishery resources such as tuna and tuna-like species in the Indian exclusive economic zone (EEZ).
- 15. Guarantee preferential access to small-scale fisheries in the Indian maritime zones, also upholding the spirit of the Murari Committee (1996) observations and updating its recommendations.
- 16. Urgently enact legislation for managing fisheries in the Indian EEZ, also taking into consideration the recommendations of the Majumdar Committee (1978).

Coastal and Marine Environment Protection

- 17. Protect inland, coastal and marine ecosystems from pollution and habitat destruction.
- 18. Do not permit nuclear and thermal power plants, chemical and other polluting industries to be set up near the coast and water bodies, including wetlands.
- 19. Consider all factors, including ecological ones, and the threat of coastal erosion, while designing ports and harbours.
- 20. Establish an inter-departmental co-ordination mechanism to address coastal, marine and inland pollution, encroachment and other issues, with all concerned ministries and departments on behalf of small-scale fishers. The State fisheries departments should take up this responsibility.

Rights to Land and Housing

- 21. Secure the rights of fishing communities to land for housing and for fishery-related activities. Land titles (*pattas*) should be issued for housing, and space used for fishery-related activities should be protected as common property.
- 22. Protect the rights of fishing communities to housing in urban and tourist areas. Land, as required, should be acquired to assure decent housing for fishing communities.
- 23. Recognize and secure the land rights of fishers and fishing communities (in relation to both private and common property) in land revenue records.

Rights to Social and Economic Development

- 24. Guarantee specific forms of protection to traditional fishing communities to enable them to improve their socioeconomic status.
- 25. Equip fishing villages with basic services, such as healthcare, potable water, sanitation and electricity.
- 26. Extend primary healthcare to all fishing communities. The Yeshasvini Health Insurance Scheme of the Karnataka government could be a good practice to be followed by other States.
- 27. Deliver nutritional support to pregnant women and children in food-insecure fishing communities.
- 28. Ensure access to education in fishing villages. Education up to matriculation, including residential facilities at educational institutions, should be made freely available.

- 29. Provide access roads to fishing villages where they are lacking, as in States on the east coast of India.
- 30. Develop hygienic landing centres and all-weather approach roads in fishing villages. Basic facilities such as ice boxes, storage facilities for fishing gear, and toilets for women should be provided at the landing centres.
- 31. Undertake a census of inland fisher/fishing communities.
- 32. Enumerate women's work in both inland and marine fisheries
- Revive and strengthen fisheries co-operative societies, and support appropriate forms of economic organizations, including self-help groups (SHGs), and fully respect their autonomy.
- 34. Ensure that access to credit and government schemes, and other economic benefits, are not restricted to the members of co-operative societies.
- 35. Guarantee credit at reasonable rates of interest to enable all fishworkers to attain economic empowerment and to free themselves from unscrupulous moneylenders.
- 36. Consider production-enhancing subsidies in small-scale fisheries, subject to the status of fishery resources.
- 37. Provide adequate compensation to fishers whose livelihood activities are affected due to activities such as oil spills, oil and gas exploration and exploitation, conservation programmes and maritime transport.
- 38. Ensure diversified livelihoods and appropriate training to fishing communities to reduce pressure on the fishery sector. In this context, fishing community-based tourism, production of value-added products, and employment of local fisher youth in marine and coastal police, and as lifeguards, should be promoted.

Post-harvest Activities

- 39. Provide hygienic fish markets, basic amenities, transport facilities and assistance to maintain cold chains.
- 40. Redevelop/upgrade existing fish markets, to ensure hygiene and access to basic facilities such as water, sanitation, and storage
- 41. Issue identity cards to fish vendors, including women fish
- 42. Protect access of women of fishing communities to fish resources for processing, marketing and food.
- 43. Provide transport facilities to fish vendors, particularly if they lack access to public transport, or are denied access to it.
- Take steps to eliminate harassment faced by women in fish markets, in particular, and ensure safe workplace for women.

Labour, Working and Living Conditions

- 45. Ratify and implement the ILO's Work in Fishing Convention, 2007, and extend its provisions to all fishers, to improve their working and living conditions.
- 46. Implement uniform social security for all fishers and fishworkers across all States and Union Territories and reduce the minimum age for their old age pension to 50 years.

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- Guarantee access to social security for all those who are engaged in fishery-related activities.
- 48. Enhance the contribution of the Centre and State governments to the Saving-cum-Relief Scheme to ensure higher monthly payment during closed season. The scheme should be inclusive of inland fisheries and women fish vendors of all States, as well as fish sorters, driers and vendors.
- 49. Provide toilets on board fishing vessels, considering that many fishers meet with accidents while using the gunwale as toilet or while using portable toilets on board trawlers and purse-seiners.
- 50. Prevent child labour in fisheries and fishing communities, and protect the right of the child to education. Schools for child workers below the age of 14 years should be set up in coastal areas. In this context, the school for child workers in brick kilns of Orissa may be considered a model.
- 51. Provide training in, and access to, diversified livelihoods to fishing communities to prevent distress migration.

Climate Change and Disaster Preparedness

- 52. Utilize effectively the financial resources earmarked for disaster preparedness in the context of natural or manmade calamities of concern to fishing communities.
- 53. Take steps to prepare both inland and marine fishing communities for disasters such as flood, sea surge and drought, and other unexpected forms of natural or manmade calamities.
- 54. Train traditional fishers in disaster preparedness. Periodic drills should be conducted to prepare coastal communities to speedily evacuate from affected areas in the event of an industrial or nuclear accident, or catastrophe.
- 55. Take steps to ensure that incidents of old ships being accidentally or deliberately sunk in coastal waters are

- minimized, given the devastating impact of such incidents on fishing activities.
- 56. Develop, in a participatory way, the adaptive capacity of fishing communities to meet challenges of climate variability and change, such as floods and cyclones, and shift or extension in distribution of fishery resources.
- 57. Introduce fuel-efficient engines and promote biodegradable fishing gear, towards mitigation, employing financial incentives. Training programmes should be developed to facilitate improved navigation and fishing methods to reduce fuel consumption, as well as to facilitate fishing community initiatives to protect and develop coastal vegetation and features.
- 58. Create a special fund for cyclone relief, especially to ensure speedy response. Cyclone shelters should be provided in all cyclone-prone States, especially on the east coast of India.

Capacity-building

- 59. Strengthen capacity-building programmes among fishing communities to enhance their awareness of rights, government schemes and resource management.
- 60. Establish systems to ensure that fishing communities are consulted during the process of formulating legislation or policy that could have an impact on their lives and livelihoods, and to enhance their capacity to engage meaningfully in such processes.

Keeping in mind the above, we urge the Government of India to develop a national policy on small-scale fisheries to protect the rights and interests of small-scale fishing communities.

The States, the Union Territories and the panchayats may also draw upon this Statement in their policies and programmes for sustainable small-scale fisheries.

We also call upon FAO to draw elements from this Statement in its preparation of voluntary guidelines on sustainable small-scale fisheries.

was drawn to a gamut of problems that continue to face fishworkers and their communities. Several proposals were mooted, with priority being given to the need to recognize the rights of fishworkers to the coastal lands customarily used by them, as well as their rights to access and manage fishing grounds and water bodies. This was particularly in the context of ongoing developments, such as those related to tourism, ports, industrial development and conservation initiatives, which were leading to the displacement of fishing communities from their lands and waters, and causing widespread pollution and destruction of habitats and resources.

The group stressed the need for equipping landing centres basic infrastructure and facilities at markets, and access to healthcare. It highlighted the importance of decent housing, sanitation, education and roads. Specific attention was drawn to the need to recognize women fish processors and vendors, including through issuing identity cards and ensuring their coverage under various government social-security schemes. The problems faced by women vendors related to transport and harassment at market places needed to be specifically addressed, it was noted. Attention was also drawn to the persistence of child labour in some

poor coastal regions. Many of the participants in the group highlighted the continuing hold of moneylenders and traders, and the need for well-functioning co-operative societies that also provided access to credit at affordable rates.

The inland fisheries group observed that the right over water bodies for fishing should be granted to fishery co-operatives comprising exclusively of fishing communities and traditional fishers. To facilitate this process, the group said, a census inland fishing of communities should be held. The group sought a uniform fishing policy for all inland water bodies. It further wanted the responsibility for dealing with fishing rights in water bodies to be handed over to the Fishery Department. The group upheld the importance of recognizing the role of fisherwomen in inland fisheries and aquaculture, and their right to a secure workplace and dignified treatment. The women fish vendors were sometimes evicted from local market places without prior notice. The group sought an end to harassment and exploitation of women in the name of paying a tax for using the market space.

Lack of education was identified as the main problem behind the exploitation of fishing communities. The group urged that a targeted educational programme should be implemented for fishing communities. They pointed out that inland fishers are regularly exposed to disasters such as floods and droughts, and to climate-change-related processes. Steps should be taken to prepare them for these disasters, it was suggested. The group sought establishing and strengthening a network of community organizations within the inland sector, with the support of the State.

In the symposium that followed the workshop, the draft statement drawn from the group reports was presented. Speaking at the symposium, Yugraj Yadava, Director, the Bay of Bengal Programme Inter-Governmental Organization (BOBP-IGO), said the Central government should circulate a model inland fisheries bill for all

States and finalize it through a participatory process. He said it is important to plan fishing capacity according to the potential of harvestable resources. Instead of building fishing harbours, it would make better sense to build smaller fish-landing centres, he said. He suggested that school curricula should include lessons on climate change, hygiene and sanitation. The allowance for closed fishing seasons, currently disbursed to marine fishing and a few inland fishing States, should be disbursed to all inland fishers, he proposed. A small-scale fisheries policy can form the subset of a revised comprehensive marine fishing policy, he added.

Pradip Chaterjee, Secretary, NFF, stressed the need for fishing communities to be recognized as the natural custodians of water bodies, with a role in their management. There is urgent need to effectively control activities that lead to pollution and habitat destruction, he said. This message was strongly reinforced by Ram Bhau Patil, an NFF leader from Maharashtra. Suman Singh from Sakhi, Bihar, spoke of the high levels of corruption that deprive communities of access to government schemes and welfare programmes. She also highlighted the importance of capacity building, particularly for strengthening community institutions, to enable them to manage and benefit from inland fisheries. Ujjaini Halim of the World Forum of Fish Harvesters and Fishworkers (WFF) said it is important to consider how to move forward through a bottom-up, pro-fisher policy, and participation of fishers in decision-making processes. International human-rights would assist in holding States accountable, she said. Civil society can assert the rights of fishing communities, and the State can create an environment conducive for respecting their rights, she added. She hoped the Government of India would support the VG-SSF, especially by drawing elements from the Kolkata Workshop Statement.

For more

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sites.google.com/site/smallscalefisheries/
Small-scale Fisheries: Civil Society
Process

www.fao.org/fishery/ssf/guidelines/en Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries [VG-SSF]

www.icsf.net/SU/stmt/O

Kolkota Workshop Statement

Meeting the global demand for aquatic food

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

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

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

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

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

The keynote address was delivered by His Excellency,

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

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

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

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

The Colombo Declaration can be downloaded from ftp://ftp.fao.org/FI/ DOCUMENT/aquaculture/ asian_ministerial_2011/colombo_ declaration_2011.pdf

ORGANIZATIONAL PROFILE

Global Alliance Against Industrial Aquaculture

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

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

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

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

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



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

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

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

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

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

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

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

VERBATIM

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

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

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Fisheries of the Pacific Islands

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

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

Offshore fishery statistics

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

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

Coastal fishery statistics

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

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

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

Important types of coastal fishing

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

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

Subsistence fishing

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

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

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

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

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

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

Source: ADR (2009)

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Roundup news, events, briefings and more...

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

INFOLOG: NEW RESOURCES AT ICSF

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

Publications

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

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

Fisheries Management in Japan: Its Institutional Features and Case Studies

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

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

Videos/CDs

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

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

FLASHBACK

Small scale, large agenda

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

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



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

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

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

ANNOUNCEMENTS

MEETINGS

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

6 - 10 December 2011 Dehradun, India

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

COFI Sub-Committee on Fish Trade—13th Session

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

WEBSITES

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

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

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

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

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

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



Endquote

Fishermen

the fishermen are patient their lines settle in clear water their wide-brimmed hats will keep off everything

on the boulevards meantime carriages come and go they carry doctors to quiet basements and children to circuses music masters to doleful violins and lovers to strange ceremonies of whalebone and gardenias the fishermen are unimpressed

over clear water where the rod's end dances the world is almost under control

and everything that matters is just

about to happen

—Alasdair Paterson from Strictly Private

