

No. 78 | January 2018

ISSN 0973-1121

SAMUDRA

THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



Cyclone Preparedness

Hurricane María

Working Conditions of Migrant Fishers

Tenure Rights

Community Fisheries

Fisheries Legislation



SAMUDRA Report invites contributions and responses. Correspondence should be addressed to Chennai, India.

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SAMUDRA

REPORT

THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS

NO.78 | JANUARY 2018

RONALD KELLMAN

FRONT COVER



Fishermen and the boats
Painting by Jiaur Rahman
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BACK COVER



*Fisherwomen boning and filleting
flying fish, Bridgetown, Barbados*

Photo by Maria Pena

email: maria.pena@cavehill.uwi.edu



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A poster in Vizhinjam, Kerala, India, identifying fishermen from the village still missing after the cyclone



On Land, at Sea, Lives Matter

Cyclone Ockhi, which caused large-scale destruction in southern India, should open the eyes of officialdom to both the landward and seaward dimensions of cyclones

As natural disasters go, Cyclone Ockhi which, between 30 November and 2 December 2017, took the lives of hundreds of fishers, injured many others and destroyed numerous fishing vessels at sea, stands out for the disproportionate damage it caused at sea than on land. The dead included not only fishers from the south Indian states of Tamil Nadu and Kerala who were on short- and long-haul fishing trips, but also undocumented migrant fishers from faraway places. This, arguably, is the first-ever cyclone that took away lives at sea on the southwest coast of India, but spared those on land. There are heart-rending stories of survivors who battled the sea for several days before they were rescued (see reports elsewhere in this issue of *SAMUDRA Report*).

Several explanations have been presented for this tragedy on the waves—from the rapid genesis and intensification of the cyclone, which cut short the time available for response, to the rarity of such storms on the southern Arabian Sea coast. But even under these circumstances, many lives, especially of those who ventured out on 29 November, could have been saved if there had been a timely response from the authorities. Search-and-rescue operations, particularly in relation to long-haul vessels, were hampered by poor knowledge about the location of these fishing vessels at sea, especially of those engaged in tuna and shark fishing, employing longlines and encircling gillnets from Thoothoor, far away from their base fishing port. There was insufficient co-ordination between different agencies.

As storm surges or large waves pushed inshore by cyclonic winds have generally led to the most number of casualties of fishers, the meteorological department and disaster managers have tended to focus on landfall. In the case of Ockhi, which only skirted the coasts of southern Kerala and Tamil Nadu and did not make landfall, its terrible impact on those at sea was almost missed out in the absence of a reporting mechanism for long-haul fishing vessels before they go out on fishing trips.

Clearly, the solutions for effectively disseminating warnings to fishers on nearshore vessels, or on the coast, will have to be different from disseminating warnings to fishers on multi-day fishing trips (such as Thoothoor's tuna and shark fishermen) in faraway fishing grounds. What they need is a culture of safety and disaster-risk reduction integrated into their work in fishing, which needs training. The fisheries and maritime safety authorities have a key role to play in this endeavour. The key learnings from Ockhi for the fisheries sector range from the urgent need to comprehensively address fishers' safety at sea in all areas of fishing operations, and the importance of

disaster-management plans to pay attention to practical and efficient early-warning systems, which reach the last mile, to well-equipped boats and trained fishers to meet emergencies. Whatever be the shortcomings of regulatory compliance, the authorities at all levels, however, have to act with alacrity to save lives at sea in an emergency, paying heed to complaints from families and friends of missing fishers.

The path of destruction in the aftermath of Ockhi underscores the magnitude of fleet migration along the western seaboard from the southern states to the northern ones. Considering the long coastline, constant

back-and-forth fleet migration both in territorial waters and the exclusive economic zone, burgeoning employment of migrant fishers with no prior knowledge of fishing, whatsoever, and an ever-expanding fishing ground from the seaboard to the high seas, the safety-at-sea regime has to be fully integrated into fisheries management. In regard to multi-day fishing vessels, in particular, there has to be a fool-proof

reporting mechanism of vessel position while on a fishing trip.

The central and state authorities in a federal system also need a coherent national perspective and co-ordinated approach to marine fishing. Different coastal states of India have to act as proxy flag, coastal and port-state authority, respectively, to improve safety and ensure effective fisheries management, considering that fishing vessels registered in one state often undertake fishing operations in the waters off a second state and land their catches in ports under the jurisdiction of a third state.

In May 1999, after a severe cyclone on the Arabian Sea struck the Pakistan and India coasts, a comment in this journal urged everyone to act and not wait to be swept away. We hope available international guidelines on sea safety, emergency response, and frameworks for disaster reduction in the context of fisheries, under the auspices of the Food and Agriculture Organization of the United Nations (FAO), especially the SSF Guidelines, can assist in preparing emergency response and disaster-preparedness mechanisms to save lives and protect fishing assets at sea. India has adopted the Sendai Framework for Disaster Risk Reduction 2015-2030 and is to implement the SSF Guidelines. Both the Guidelines and the Sendai Framework promote and protect all human rights and provide an excellent opportunity to improve emergency response and to reduce disaster risk. Cyclone Ockhi should be an eye-opener to recognize not only the landward but also seaward dimensions of cyclones. We need to save lives both on land and at sea.



In the Eye of the Storm

In the wake of tropical cyclone Ockhi, the focus now should be on improving at-sea cyclone preparedness and search-and-rescue co-ordination to save precious lives

As a low-pressure system in the Bay of Bengal, near the southeast coast of Sri Lanka, intensified into a depression in the early hours of 29 November 2017, as per its well-established protocol, the Indian Meteorological Department (IMD) issued its first bulletin warning of gusty winds and heavy rainfall over south Kerala and south Tamil Nadu. The bulletin was dispatched to the senior-most levels of the central and state governments, including the control room of the National Disaster Management Authority and the chief

crucial to the coastal villages in the region where the rough weather was expected. For fishermen along India's Arabian Sea coast, the October-December months are the busy period, and particularly so along the densely populated coasts of southern Kerala and Tamil Nadu. The post-monsoon Arabian Sea, where cyclones are relatively rare, is calm and the catch is plentiful. Fishing is as diverse as it is competitive in these parts. Shore seines dot the coasts of several villages; small non-motorized catamarans go out on short morning fishing trips near the shore; larger motorized plywood and fiberglass craft or *vallams* go out farther—at least 20 nautical miles—staying out at sea for anywhere between half a day to five days. Larger mechanized vessels (15-18 m overall length or OAL), leave from the harbours in Kochi and Kollam, some of them long-liners voyaging 800 nautical miles in search of shark and tuna. Each group presents a different set of challenges of fishermen at sea, but these groups as a whole had been neglected in official disaster planning.

Ultimately, any solution has to take into account fishers livelihood and working conditions. Fishworkers' safety has to become a priority now.

secretaries of the states of Kerala and Tamil Nadu. Fifteen per cent of all depressions develop into cyclones, and the bulletins are meant to forewarn the government's disaster managers, the shipping industry and coastal communities.

As the information reached the Kerala government, Alban Alphonse was preparing to go to sea for the day's fishing in Poonthura village, less than 10 km from the state capital, Thiruvananthapuram. Each day at least 600 fishermen from the village set out to fish at around 2 pm and return just after dawn the next day. Since they did not get any information from their state government warning them not to go out to sea, Alban and the others went fishing at the same time on that fateful November day.

The exact time when the bulletin was issued—1150 hrs IST—was

Early warning system

Thirty-seven-year-old Alban was accompanied by two other fishermen in a 30-ft-long plywood craft fitted with an outboard engine, the most common type of fishing vessel in the region. They navigated 19 nautical miles southwest of Poonthura and at sunset, they lowered anchor to start paying out the nets. "There were a few waves and some wind but this wasn't unusual in our work. But then it started to rain and it got foggy, and when we pulled in our nets at 3 the next morning, we noticed on our GPS (global positioning system) that the

This report is by **Manas Roshan** (manas.roshan@gmail.com), journalist and writer based in New Delhi, India

vallam had drifted another 12 miles.” The current had been too strong for the anchor and had pulled them down deeper. They decided to return to the shore but the winds buffeting the boat made the progress very slow. Then, suddenly, the waves started to crash against the boat from every direction.

Contrary to the IMD’s initial forecast, BOB 07—as the system was called—had rapidly strengthened into a cyclonic storm by the early morning of 30 November. The process took just 24 hours, as against the usual 72 hours or more. Meteorologists were calling it Ockhi—which means ‘eye’ in Bengali—and while its winds were between 45-65 kmph at the shore, Alban and other fishermen were caught in the cyclone’s cloud bands, which covered a radius of over 200 km. A 10-ft wave finally capsized their vessel and threw the three men overboard. “Normally, we can withstand fairly strong winds, though a careless operator could cause the vessel to flip even against a slight breeze,” said Alban, sitting in his house in Poonthura last month. “This time, there was no way to hold it steady even by riding with the wind.”

When they noticed the change in weather, the families on shore had expected their men to return before their usual time. But when many did not return later that morning, the women rushed to the local church, a pillar for the communities on the coast in southern Kerala and Tamil Nadu. “Only when Father made frantic calls to the local administration did we find out that there was a cyclone coming,” said Delby, who lost her 38-year-old husband in the cyclone. A month after the cyclone, the government informed the Lok Sabha (India’s lower house of Parliament) that 100 people were confirmed dead and nearly 500 were still missing, all of them fishermen caught in Ockhi’s devastating path. Over 260 fishermen were injured. Nearly 400 fishing vessels were either fully damaged or lost.

On that first day, 90 men had not returned to Poonthura. Several swam or floated to safety farther up north, even as far as Karnataka, or were rescued by other fishers, the Coast

Guard and the Indian Navy. Alban was rescued with five other men by a navy helicopter on the afternoon of 1 December. They had stayed afloat holding on to their capsized boat for over 30 hours. By end December, seven dead bodies had been recovered but 29 men were still missing from the village. Poonthura’s beaches are lined with loudspeakers for emergency announcements but these went unused on the 29th. “Bad weather warnings are rare in these parts but we did occasionally get them from the church during the monsoons. The Collector’s office usually alerts the church,” said Leon, Alban’s boatowner and a retired fisherman. “If we had been informed, no one would have gone to sea that day.”

The Kerala government has questioned the IMD’s delay in issuing a cyclone warning, which came only at 8:30 am on 30 November, by which time hundreds of boats were already in the storm’s path. “Normally, meteorologists get at least five to six days to track the progress of a cyclone from genesis to landfall,” said S Sudevan, director of IMD’s Thiruvanthapuram Met Centre. “But Ockhi intensified in just 24 hours, which is very rare. Even so, our very first bulletin warned fishermen not to venture into the

MANAS ROSHAN



Silveraj, 38, of Poonthura village in Kerala, India, died due to the cyclone on 30 November. His wife, Delbi, doesn’t want their son to be a fisherman

Interview with Sahayam, Vizhinjam survivor

Vizhinjam in Thiruvananthapuram's Nayyattinkara taluk is a busy fishing village just a few kilometres from the bustling tourist hub of Kovalam. The village of about 20,000 people has over 5,000 active fishermen. Most fishermen in Thiruvananthapuram coastal villages like Poonthura and Vizhinjam use 6-8m long non-mechanized boats made of plywood or fiberglass fitted with outboard engines (usually two, of 25 hp and 9 hp). They are mostly single-day fishers but in each village the timing of departure and return varies, depending on the topography of the coastline and the composition of the catch in their traditional fishing zones. In Vizhinjam, the fishermen set out between 2-3 am every morning and return by 11 am. Vizhinjam has its own harbour which allows the fishermen to venture out at night and not depend on the tide.

In the aftermath of cyclone Ockhi, seven bodies of fishermen have been identified but 30 are still missing (20 from non-mechanised and 10 from mechanized boats operating in other districts.) A majority of those dead/missing were young—under 35 years.

Q: How far do your boats go to fish and is there a particular type of fish that dominates your catch?

Sahayam: We travel about 20 nautical miles to begin with, because there's no catch closer to the shore. Then depending on what the conditions are like, we even go up to 60 nautical miles. There isn't any one type of fish we look for. We bring home whatever we catch but get a lot of *choora* (tunnies).



Sahayam, a fisherman from Vizhinjam, held on to his capsized *vallam* (motorized country craft) for nearly two days before he was rescued by the navy near the Kollam coast, India

Q: What are your costs per trip and how much do you catch on a good day?

A: To fish within 25 nautical miles, the cost is about INR3,000. To go deeper, it can go up to INR4,000 to 5,000. On a good day we can get even INR10-20,000 worth of fish. On bad days, we might even make a loss.

Q: So, this last month that you haven't been working, how much have you had to borrow?

A: In a month we need about INR20,000: children's school fees, food expenses, etc.

Q: When did you go to sea on the day of the cyclone and what was the weather like?

A: On the morning of 30th November. I had my own boat, *Sajitha-Sajith*, and there were four of us that day on board. Two of us returned but the others were lost. The weather was perfectly fine when we left. We were five boats travelling together and we lowered anchor at about 25 nautical miles. But our catch was negligible and one of the boatmen said that the wind was getting stronger and that we should go ashore. So, we started at around 7 am from that spot and when we were about 9 miles out, the storm struck. We'd been moving for over two hours when the wind and the rain came. It was so stormy after that; we couldn't look at our GPSs and we lost our bearings. We couldn't even see the other boats near us.

The boats were filling up with water and finally a big wave threw two of the men into the sea. We'd managed to hold on till about noon. We couldn't do anything when the men first fell overboard. The wind was pulling the boat away and if we didn't hold on, we'd also fall out of the boat. Then 20 minutes later, another wave overturned our boat but before we were thrown, Jose (*the other fisherman who remained with Sahayam*) and I had tied ourselves to the boat. The wind and the waves were terrifying through that evening and night. But we held on to the rope and were finally rescued by a navy vessel on Friday

afternoon (1st December). Not that we expected to live; we were certain that we'd drown, because even the previous day we thought some ship or fishing vessel would rescue us but then when there was no pause in the storm, we lost hope. But at least our bodies wouldn't be lost if we tied ourselves to the boat. Those back home would know it's us looking at the name of the boat because the corpses are unrecognizable after a few days at sea.

Q: Did your family expect to see you again?

A: They had gone from worry to despair before they saw us but while there was the joy at seeing us alive, their cries only got louder—tears of joy and relief. Others, whose husbands or sons had been with us at sea, were still grieving but they were happy at least some of us had returned.

Q: While you were floating with your boat, did you encounter any ships passing by?

A: On the evening of the 30th a big ship passed very close to our boat. We waved with our shirts and called out but they didn't see us. We saw another ship just about two hours before the navy arrived. We waved to that one too but they didn't come to save us. Then, when the navy rescued us, the personnel told us that they wouldn't normally venture that far but had been alerted about our location by a ship.

Q: Did the navy personnel tell you what your location was when you were rescued?

A: Yes, they said that we were found 54 nautical miles west of the Kollam coast (over 90 miles north of Vizhinjam). We were on the navy vessel for four days; they took very good care of us. They moved us to a smaller vessel which dropped us at Cochin. They were told to extend their search for seven days so they themselves couldn't bring us back.

Q: The IMD's alerts said that the wind speed that day was about 45-55 kmph, which many say is fairly common. Are your boats threatened by such strong winds or were the conditions that day very different?

A: If we'd got a warning that day, we wouldn't have gone. We don't go fishing when we know that the sea is rough. One can tell as soon the boat leaves the shore, so we don't go very deep into the sea and come back soon. I've never see such big waves as we experienced that day. A wall of water would tower over you.

Q: Why is it that the fishermen continue to go to sea without life jackets despite there being a rule to carry safety equipment?

A: Certainly, life jackets would have saved several lives, but they're not something you can buy in the market around here. The fisheries department had distributed a few life jackets to some boat owners years ago but there are over 2,000 boats going from this harbour and the surrounding areas. That is around 5-6,000 men.

Q: What would be a better way to warn fishermen about cyclones when they are already at sea? Would you be able to afford satellite phones or distress signals?

A: If the government can provide them to us, we can. Even an expense of INR10,000 is a big amount for us to afford. There might be a few well-to-do boat owners who can afford satellite phones but the most effective way to warn us is through the church.

Q: Will you continue to go fishing after this or would you like to do something else?

A: All I know is fishing; I've been doing it for 15 years. I left school after class 5. The government says it will help us and compensate us for our losses but what do we do till the money arrives? I need to repay the bank loan on my boat. I asked the bank for an extension but they didn't allow it. Nowadays, we mostly stay home, come here to the harbour in the evenings and return at night to our families. The mood at home is also changing; they were very happy when we returned but how long can we live on debt? So, the conversations at home are also getting tense.

sea. The IMD has a well-established standard operating procedure (SOP)."

"We convened an emergency meeting on 30 November, as soon as we saw the word 'cyclone' in the sixth bulletin that morning. The rescue operations began soon after," said P Kurien, Principal Secretary of Revenue and the Disaster Management State Relief Commissioner for Kerala. It is a fact that 45-65-kmph winds are common for the fishermen at sea, but contrary to what the Kerala government has said, the IMD bulletins are only issued in the case of a depression, along with a disclaimer about possible intensification. Next door, in Kanyakumari's fishing villages, the Tamil Nadu government used the churches on the coast to alert fishermen the previous day, a testament to the state's well-developed disaster management systems and infrastructure. "Our control room in Chennai got the IMD alert on 29 November and as per the SOP, we informed all coastal district collectors and fisheries directors through email, fax and text messages," said Rajendra Ratnoo, Tamil Nadu's Commissioner of Disaster Management. "One gazetted officer is posted on duty round the clock and during the October-December period, which is the cyclone season, it's an officer at the level of Deputy Collector," said Ratnoo, who claims to have personally informed the fisheries department at 1:30 pm on the 29th.

Despite the state's efforts, eight villages in Kanyakumari sustained the heaviest losses, with 24 dead and 237 still missing. This was because most fishermen of Thoothoor and its surrounding villages work on the mechanized vessels operating from Kochi. Their month-long fishing trips in search of shark and tuna completely cut them off from the government's warning systems and now their routes—west and northwest of the Kerala coast—put them directly in Ockhi's path. As Alban and other fishermen were tossed around and finally pushed north, the cyclone's real fury was headed towards the Lakshwadeep Islands, where gusting

winds of up to 180 kmph were recorded, according to the IMD's preliminary report on the cyclone.

Selvaraj, a 35-year-old boatowner from Vallavilai in Kanyakumari district, had left Kochi harbour with 13 workers on board his 18-m boat on the night of 26 November. After navigating west, they were fishing to the south of Lakshwadeep Islands on 1 December when the cyclone struck. "In that area, the navy usually informs us if we're in a restricted area, through our wireless radios (Very High Frequency or VHF sets). They could have warned us similarly about the cyclone," said Selvaraj, sitting on the beach sand outside his village church. His boat safely reached Lakshwadeep's Kavaratti Island on the morning of the 3rd after he and his men had weathered the storm for over two days. "The boat was heavily damaged. It'll cost us about INR2-2.5 mn (1 USD=INR 64) to replace the nets, VHF sets, repair the boats, etc," he said, adding that they were lucky to be alive.

"All our boats carry two VHF radio sets. One is always tuned to channel 16 (156.8 MHz, a marine VHF radio frequency used internationally for distress calls) but we communicate using channel 65 because otherwise our conversations would clutter up the airwaves used by the ships and the navy," said Dickson, another experienced fisherman from Vallavilai. "We frequently contact passing ships when our drift-nets are in their paths, and most of them respond. Our cellphones are unreachable that far inside the sea and we don't have satellite phones. Why couldn't the ships have alerted us?"

Kurien, Kerala's disaster relief commissioner, said that this was done but that it was impossible to save everyone. "On 1 December, the Chief Secretary informed the shipping director general and many lives were saved by the ships," said Kurien.

Coastline

Remarkably, the physical coastline of the two states bears no signs of the devastation caused by Ockhi because almost all the loss of life occurred at

sea rather than on land. There is little reliable data on previous cyclones and the number of fishers lost at sea—a United Nations study on the 1996 Andhra Pradesh cyclone lists 600 casualties, though the number of dead on land was much higher. But meteorologists agree that the disproportionate number makes Ockhi unique and points to an overlooked facet of cyclones: the safety of fishermen at sea. “The IMD has specialized bulletins for sea conditions and fishermen warnings but landfall is the main concern”, said Mrityunjay Mohapatra, a senior IMD scientist and head of the Regional Specialised Meteorological Centre (RSMC) of the World Meteorological Organization (WMO) in New Delhi. Perhaps the blind spot with regards to fishermen is because the efforts of most disaster-management programmes in the past have been on mitigating the damage caused by storm surges—unusually big waves caused by cyclonic winds, which account for 90 per cent of casualties during cyclones, according to the NDMA’s cyclone management guidelines.

“The failure of the state was on two levels,” said T Peter, Secretary of the National Fishworkers’ Forum (NFF) in Thiruvananthapuram. “First, IMD’s alert came too late and the message didn’t reach the fishermen. The second is a bigger problem: once the situation was assessed, why were the search-and-rescue measures so badly managed?” Throughout the coastal villages of Thiruvananthapuram and Kanyakumari districts, distressed fisher families complained of inadequate response. “They could have taken the fishermen along with them sooner. We know where our men go to fish,” said Benjamin Mammanus from Poonthura, who accompanied an Indian Navy vessel on 4 December. “With our help, they were able to find several large vessels but by then it was too late for the crew on smaller craft,” he said.

The centre and the state agencies are deliberating sophisticated technological solutions for emergency warnings, like VHF and satellite

radio sets, distress alert transmitters and the Indian Space Research Organization’s ‘NavIC’ (similar to the GPS). These will be necessary to address the needs of Thoothoor’s deep-sea fishermen. But closer to shore, the fishermen are now learning about simpler measures that had been overlooked: port warning systems, safety equipment like life jackets and buoys (mandatory according to the law but never enforced), and a registration system where all boats and crew lists are maintained on shore. “The fishermen will have to stop viewing sea-safety measures as a burden. The floatation devices could have saved several lives,” said Peter (NFF).

The authorities admit that the dissemination of weather warnings to the last mile remains a challenge; but here, too, it has overlooked a cheap and effective solution: community radio. Locally run stations in Odisha and Gujarat provide crucial lessons for a community-based disaster-management approach. During the 2013 Phailin cyclone in Odisha, the state government managed to evacuate over 800,000 people from coastal villages, albeit with the help of accurate IMD predictions issued six days in advance. But the dissemination of the warning was helped by the media, particularly community radio stations like Radio Namaskar, a Konark-based coastal station which broadcasts content developed by, and for, the fishing community, in Odiya and Telugu. “FM radio technology is cheap and if the towers are on the coast, boats as far as 50 km in the sea can listen to our bulletins,” said N A Ansari Shah, chairman of Radio Namaskar. “We don’t only broadcast weather forecasts, but also songs, discussions, market prices and other practical information that is crucial to fisherfolk.”

“Ultimately, any solution has to take into account fishers livelihood and working conditions,” said Peter. “This problem cannot be solved with another welfare scheme or state relief package. Fishworkers’ safety has to become a priority.”

For more



http://www.imd.gov.in/alerts/20171129_al_238.pdf

IMD Bulletin 1 (29 November, 2017)

http://www.imd.gov.in/alerts/20171130_al_245.pdf

IMD Bulletin 6 (30 November, 2017)

<http://www.rsmcnewdelhi.imd.gov.in/images/pdf/sop.pdf>

IMD Cyclone SOP

<http://www.rsmcnewdelhi.imd.gov.in/images/pdf/publications/preliminary-report/cs29nov-06dec.pdf>

IMD Ockhi Preliminary Report

<http://www.ndma.gov.in/images/guidelines/cyclones.pdf>

NDMA Cyclone Management Guidelines

<http://www.fao.org/docrep/012/al216e/al216e.pdf>

Baseline Study for training in sea safety development programme in East Godavari District, Andhra Pradesh, India

<https://www.researchgate.net>

A Description and Analysis of the Events Occurring at sea and Land on 6 and 7 November, 1996 in East Godavari Andhra Pradesh

A Stitch in Time

Cyclone Ockhi, which hit southern India late last year, brought out the need to empower communities to manage risks through locally owned and locally appropriate approaches

Historically, the western coast of India has always witnessed fewer cyclones than the eastern coast. While 58 per cent of the cyclones that developed over the Bay of Bengal crossed the east coast, only 25 per cent of the cyclones that developed over the Arabian Sea affected the west coast. A marked deviation from this status quo was observed on 30 November 2017, when Cyclone Ockhi killed 174 fishermen from the state of Kerala and 108 fishermen from the state of Tamil Nadu. The economic loss caused by Ockhi amounted to US\$5.07 bn.

Official sources put the number of missing fishermen as 527—300 from Kerala, and 227 from the Kanyakumari district of Tamil Nadu. However, the

The harbour at Thoothukudi in Tamil Nadu implements a simple token system for fishing boats venturing into the sea. Details like the boat number, name and telephone number of the boatowner, and the number of fishermen on board, as well as the expected date of return are registered online before issuing a token. After reaching the shore, the fishermen return the token. Similar systems have been introduced in the East Godavari District of Andhra Pradesh and in Maharashtra.

At Thoothukudi, Tamil Nadu, the Fisheries Department has also arranged a checkpost to regulate the number of fishing boats venturing into the sea at a given point of time, which helps avoid overcrowding. These are measures that Kerala could have followed.

The Indian Meteorological Department (IMD) is the nodal agency for tracking, monitoring and issuing early warnings to all designated authorities. Notwithstanding the increasing tendency for cyclones in the Arabian sea, the Area Cyclone Warning Centres (ACWCs) and the Cyclone Warning Centres (CWCs) of IMD cover only the eastern coast, leaving a visible gap on the western side. IMD has a detailed procedure for a four-stage warning, including a Pre-Cyclone Watch (issued 72 hours in advance), a Cyclone Alert (48 hours in advance), a Cyclone Warning (24 hours in advance, with high priority of telegrams twice a day) and a Post-Landfall Outlook (12 hrs in advance).

Timely advisories

Bulletins are also issued to the Public Relations Department (PRD) for distribution to the mass media and

A stitch in time can perhaps save not nine but millions of lives!

estimates put forward by fishermen's groups and the Catholic Church is double the official number. Failure of both the state and the central governments to even come up with the exact number of fishermen and fishing boats lost at sea, has come under severe criticism. Even two months after Ockhi the disaster-management agencies were groping in the dark about the number of casualties.

Despite stipulations in the Marine Fishing Regulation Act (1980), hundreds of fishing vessels still operate in Kerala waters without any registration or fishing licence. During exigencies such as cyclones or tsunamis, lack of knowledge of the actual numbers can prove fatal.

*This article is by **K G Thara** (thara.kg@rediffmail.com), Head, Disaster Management Centre, Government of Kerala, India*

for immediate broadcast by the radio and television stations. IMD also has an automatic telephone answering service (No: 1800 180 1717) and a facility for registering one's mobile number for receiving cyclone alerts vis-a-vis short messaging system (SMS) service. The language of such official warnings, however, remains archaic and too technical for the common man to decipher. On the contrary, weather warnings issued by the Hong Kong Observatory, for instance, give separate warnings for the local public, avoiding scientific jargon.

While controversies abound about whether the IMD and the Indian National Centre for Ocean Information Services (INCOIS) had sent out timely advisories, the most important fact remains that even the officials at the State Emergency Operation Centre failed to grasp the gravity of the situation from the 'technical' bulletin.

Emergency Position Indicating Radio Beacons (EPIRBs), also known as Search and Rescue Beacons, developed by the Vikram Sarabhai Space Centre (VSSC) of the Indian Space Research Organisation (ISRO) at Thiruvananthapuram, and manufactured by Keltron at its Karakulam complex, Kerala, have been distributed to fishermen on the Kerala coast over the last few years as a means to safeguard their lives during emergencies at sea. ISRO is also designing and developing the first indigenous, low-cost global positioning system (GPS)-fitted EPIRBs, from which distress signals can be picked up by the search-and-rescue vessels. These will only cost INR3,000, compared to the price of INR50,000-60,000 a piece for those imported from the United States, the United Kingdom or France.

In the aftermath of Ockhi, ISRO has also developed navigational equipment based on India's regional satellite navigation system, called NAVIC, to warn fishermen about adverse weather conditions. Initially, 250 boats will reportedly be fitted with these equipments on a trial basis. The specialty of these equipments is that the information will be transmitted in the local vernacular

language (Malayalam), up to a distance of 1,500 km from the coast.

While some of the fishermen, on a personal basis, use mobile phones that can operate up to 50 nautical miles (92.6 km), they complain that the wireless sets provided by the Fisheries Department work only up to 20 nautical miles (37.04 km). The major limitation of NAVIC devices is that they allow only receiving of information, with no provision for sending messages—they are fitted with only a receiver, not a transmitter.

Community radios can be established in cyclone-prone areas with the help of open universities such as the Indira Gandhi National University (IGNOU), NGOs and community-based organizations (CBOs), for timely dissemination of warnings. The first exclusive community radio initiative in India for fisherfolk, named Alakal, was initiated on 1 May 2006 in Thiruvananthapuram district of Kerala.

The problems resulting from corrosion of batteries and non-receipt of signals in transistors can be overcome by using battery-less, low-cost hand radios which can receive warning-broadcasts from All India Radio, the national station. Television and radio stations can also utilize the cell broadcast facility via the



A HAM Radio used in emergency communications is an immensely useful tool for cost-effective dissemination of information

GSM (Global System for Mobile communication) network operators, to broadcast emergency messages on a real-time basis.

Setting up of Village Information Centres (VICs), under the supervision of the state government, can provide information on cyclone warnings directly to the community and also empower the rural population. Around 50 such VICs are currently operational in the Cuddalore District of Tamil Nadu, where the dissemination is effected through very high frequency (VHF) wireless networks, integrated with a public address system (PAS).

The climate-integrated community-based early warning system implemented by the Adaptation Learning Programme (ALP) of Dakoro, Niger, is one of the best examples of integration of community-based adaptation for disaster risk reduction (DRR). This is a decentralized, participatory programme where volunteers are selected from a cluster of four or five villages for multi-level interventions at village, municipality, local, regional and national levels during different phases of a disaster.

The ham radio is an immensely useful tool for cost-effective dissemination of information, especially in times of natural disasters such as earthquakes, floods, cyclones or tsunamis (HAM is an acronym for Hertz-Armstrong-Marconi, from the first letters from the last names of three radio pioneers: Heinrich Rudolf Hertz, Edwin Armstrong and Guglielmo Marconi). While the conventional communication systems, like mobile and land phones, get destroyed or fail due to overloading, these equipments have stood the test of time by providing uninterrupted flow of information. A network of amateur radio licensees in Kerala can also serve as an alternative system, should the means of conventional communication fail.

Disaster risk reduction is best achieved by forming task forces at the community level. Apart from representatives from women's organizations, these teams should comprise retired personnel, youths from local NGOs, CBOs, residential

organizations, and volunteer organizations such as the Civil Defence, Nehru Yuva Kendra Sangathan, the National Cadet Corps, the National Social Services, the Indian Red Cross Society, Bharat Scouts and Guides, and St. John Ambulance Brigade. They should work towards building up the capacity and resilience of vulnerable communities.

Quick Response Teams for first aid and search-and-rescue at the community level can also play a vital role in disseminating warnings and render help during the relief, rescue, rehabilitation and reconstruction phases. The recently formed Rapid Response and Rescue Force (RRRF) of the Kerala Police, even after rigorous training in various aspects of rescue and casualty management, remains severely underutilized.

A prompt, well-co-ordinated and effective response will not only minimize the casualties and damage to property, but also will facilitate early recovery. Apart from institutional arrangements, a set of procedures (SOP) clearly delineating the roles and responsibilities of each stakeholder agency is also required. Written documents on specific actions to be taken in relation to preparedness, early warning, response, relief and recovery phases, can considerably reduce the risk levels from any disaster. The initial confusion and chaos noticed in the early hours of the management of Cyclone Ockhi show that a SOP, in whatever form, was clearly missing.

Mitigation

As climate change will continue to exacerbate both the impact on, and the number of casualties of, among fishing communities, there is an urgent need to take disaster-mitigation efforts beyond the award of compensation to the victims. Disaster-risk insurance is both a cost-saving and risk-management strategy, to increase the resilience of individuals and communities to external shocks. A comprehensive, indemnity-based (factoring the actual loss) insurance policy for climate-

related disasters, is on the anvil in Kerala. It is proposed that families below the poverty line (BPL) are completely exempted from paying the premiums.

Notwithstanding the long-term benefits of non-engineered measures such as planting of mangroves along the coast, risk-reduction measures have traditionally leaned more on structural interventions such as construction of sea walls, cyclone shelters, cyclone-resistant buildings, road links, culverts, bridges, and so on. The creation of green-belt buffer zones, also known as shelter belts or bio-shields, can significantly reduce the loss of coastal habitats, and protect human lives and property from cyclones and tsunamis.

However, the mangrove forest area in Kerala has been reduced to 1,750 ha from a historically high level of 70,000 ha. An awareness drive on the ecological significance of conservation of mangrove forests will help reduce disaster risks along the coastline.

Climate change and consequent warming of the oceans pose multiple threats to the fisheries sector, the most glaring impact being the decline in the availability of marine resources. Kerala's annual catch of mackerel, for example, was 399,000 tonnes in 2012, which drastically dipped to 45,000 tonnes in 2016. The concept of 'alternative livelihoods' or alternative income generating (AIG) activities has emerged from similar unsustainable exploitation of other marine resources and the increasing pressure on them by a burgeoning population.

While promoting both environment and natural resource (ENR)-based livelihood activities, such as agriculture and livestock, aquaculture, and bee-keeping, and non-ENR-based livelihood activities such as handicrafts, and carpentry, care should be taken not to confine women to gender-specific activities such as garment-making and cooking.

Despite significant advances in meteorology, hundreds of fishermen in Kerala still rely on the traditional wisdom handed down over generations for predicting weather

and sea currents. During Cyclone Ockhi, Marianad village reported zero casualty, thanks to the premonition of some of the traditional fishermen. Documentation of such traditional wisdom will augment mitigation measures to help face future challenges. Various Bureau of India Standard (BIS) codes have been developed for the construction of cyclone-resistant structures, such as shelters, roads, bridges, canals and transmission towers, which are seldom followed. Strict compliance should be ensured.

Realizing the need for empowering the younger generation, the Government of India had introduced disaster management in the school curriculum, but it is confined to Central Board of Secondary Education (CBSE) schools. Since educating a student is a sure way to build up community resilience, the State Education Boards should also be encouraged to follow suit. Empowering the communities to manage their risks through locally owned and locally appropriate approaches was the most important theme which emerged in the 2017 Global Platform for Disaster Risk Reduction, at Cancun, Mexico, in May 2017. The rationale behind promoting community-based disaster risk management is that communities are the first responders to a disaster, and hence they should be given necessary training to mitigate and manage their risks.

During cyclones fishermen have often drowned for want of timely help, especially since rescue agencies took a long time to spot those affected, as the precise whereabouts of the victims were not known. Recruitment of educated people from the fishing community to the Coastal Police and Marine Enforcement Wing can address this issue and ensure better co-ordination during such rescue operations. Proper representation and inclusion of local community members in various disaster-management bodies is also needed.

New initiatives

Lack of proper training and inept handling of specialized rescue devices



The Cyclone Warning Centres (CWCs) of IMD crowd only the eastern coast, leaving a visible gap on the western side

had often led to false alarms being sent out to rescue agencies, leading to wastage of time and resources. Sensitisation and awareness of fishermen about rescue operations should, therefore, become an integral part of any disaster risk reduction initiative.

According to the Global Climate Risk Index (2018) released at the 23rd Conference of the Parties (COP23) of the United Nations Framework Convention on Climate Change (UNFCCC), the Indian subcontinent is one of the most vulnerable countries to climate-related risks of rising sea levels, storms, floods, drought, heavy rainfall, landslides and heat waves. Kerala occupies a special place in the vulnerability atlas of India, owing to its geographical and geomorphological peculiarities. The coastal plains of Kerala have also earned the status of being among the most populated areas in the world, with a very high

population density of 2,168 persons per sq km. (In 2012 the state's total population was 34.8 mn.) The most significant vulnerability factor of the state, apart from the dense settlements, is the low altitude of the coastal plains, rising just 3-6 m above the mean sea level, making the communities extremely vulnerable to the vagaries of sea-level rise and other disasters.

A stitch in time can perhaps save not nine but millions of lives!

For more

<http://www.tn.gov.in/tsunami/index.html>

Tamil Nadu State Disaster Management Agency (TNSDMA)

<http://sdma.kerala.gov.in>

Kerala State Disaster Management Authority (KNSDMA)

Mortal Embrace

Conflicting forces of nature, alongside the ecological intervention of traditional fishermen, helped mitigate the destruction wrought in Puerto Rico by Hurricane María

The impact of the destructive winds of Hurricane María along the northern coasts of Puerto Rico in late September 2017—not long after Hurricane Irma had swept by—was ugly, immense and immediate. Docks, shorelines and boats were destroyed soon after the hurricane made landfall on 20 September with wind speeds reaching 150 km per hour. Even three months after the hurricane subsided, the lack of electricity in 98 per cent of the country has left fisherfolk without ice to preserve the fish they sell. Many fishermen lost their boats, their *nasas* (fishing traps) and other gear. With the municipality authorities proving ineffectual in clearing the debris left behind by the hurricane, fishermen have been unable to fish from shore.

In Villa Pesquera in Catanho, the immediate damages amounted to US\$45,000 to US\$65,000 as losses to the dock and US\$25,000 as lost income for three months suffered by the 25 organized fishermen who were unable to fish.

And yet how did some coastal areas, such as those of the Vega Baja beach to the northwest of the capital city of San Juan, escape from suffering the same impacts despite being less than 25 m from the coastline and having a higher housing density? It almost seemed a miracle that the 150 houses along the Vega Baja shoreline were left standing intact after Hurricane María, even though Hurricane Irma had destroyed the retaining walls in front of many houses.

It was not as if there was no impact on Vega Baja—hundreds of metres of power lines were cut and hundreds of trees and palms uprooted. The shoreline was left so full of debris that reaching the sea was impossible

for weeks. The houses and small businesses of the neighbourhood were also affected behind the seashore. In the neighbourhood of Sandín, former subsistence fishermen and fisherwomen, who had built their houses with zinc or wooden roofs, were left roofless.

But how did the houses by the sea remain intact? One person saw everything that happened the day María struck. From the third floor of a small building of Beach Chalets about 500 m from the sea, Juan witnessed the natural phenomenon during its eight-hour duration over the island.

Many fishermen lost their boats, their *nasas* (fishing traps) and other gear.

He explained how the sustained gusts of fierce winds—never before experienced in the place—ruthlessly tore apart the entire coastal marine territory, whistling a deafening shriek and destroying everything with its whirlpools that turned everything into rubble. “And there, defiant with its controlling power, the air convulsed, converting every minute into an eternity,” said Juan.

Accomplices of survival

He added that at the same time, a few metres from the ruthless fury of the wind, immense waves formed from the deep sea, which, when they hit the coral reef line, rose up to 5 and 6 m in the air, as if basking in their power and speed, with arms outstretched in a single mortal embrace.

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Juan explained that before they could reach the shore, the immense waves were repelled by the wind that returned the waves to the depth of the sea. Thus, a never-ending duel between the two forces of nature took place—waves trying to reach the shore to wreak havoc versus the winds that occupied the coastal territory, preventing their opponent from reaching shoreline.

As people returned from their shelters near the city, greetings, hugs, water and food welcomed them. But who should they thank? Definitely not Hurricane María. The answer lies in the depths of the sea—the coral reefs, those silent accomplices of survival, the very reefs that have made the beach of Vega Baja special. During the hurricane, when the waves hit the reefs, they were raised to a point so high that the winds could repel them easily.

Ricardo Laureno, scuba diver, fisherman, surfer and tireless friend of the corals of Vega Baja, has long been responsible for their

protection. Together with his family and hundreds of volunteers from all parts of the island and the world, he has been replanting corals for years. His organization—Vegabajeños Promoting Sustainable Environmental Development (VIDAS)—is a community collective founded in 2006 as a response to the constant threat of privatization of public-domain assets and conservation areas. VIDAS serves as a link between traditionally marginalized coastal communities, academia, agencies and other entities that also provide pro bono services in legal, sociological, scientific and educational matters, and works on ecological rehabilitation projects.

Laureano is a representative of the Vega Baja section of the Surfrider Puerto Rico Foundation. He started reef conservation in 1996 when he noticed the construction of a residential complex that threatened the reef and the public use of the coastal sector.

“We were alarmed and contacted Dr. Edwin Hernández Delgado from

MARÍA SUÁREZ TORO



Fishers Musin Suarez and Fernando Maldonado at Cívico in the town of Vega Baja, northern coast of the Archipiélago of Puerto Rico. The coastal communities are presently assessing the post-María situation and the deteriorated conditions of the fisherfolk and their environment



Shores have become inaccessible at Civico, Puerto Rico. With the municipality authorities proving ineffectual in clearing the debris left behind by the hurricane, fishermen have been unable to fish from shores

the Center for Applied Tropical Ecology and Conservation CATEC/UPRRP. He visited Vega Baja and provided literature to monitor changes in the area. “In May 2006 we were successful in placing two species of acroporids of the Atlantic, abundant in the area under the Endangered Species Act. In collaboration with the academy, we convinced other sectors to act to conserve the Vega Baja coast,” says Laureano.

In 2008, the area was declared a ‘Critical Habitat’ under an Order 4 (d) of the aforementioned Act. A community science project has since been started to allow visitors to merely visit the reef or to collaborate as a project volunteer. Their motivation, says Laureano, a convinced conservationist, is “to give back a little to the planet that has given us shelter and food, to allow our children and future generations to inherit a planet better than the one they’ll get if we don’t do anything”.

The coastal communities of Puerto Rico are presently assessing the post-María situation and the deteriorated conditions of the fisherfolk and their

environment in a holistic manner by also recognizing the necessity of collaborating with nature. That is perhaps the best lesson Hurricane María left in its wake.

Sadly, though, the magnitude of the destruction caused by the hurricane has not yet been fully assessed. Fishermen throughout the island coasts of Salinas, Catanho, Lajas, Mayaguez, Ponce and elsewhere claim that the government policies after the hurricane have centred on agriculture, excluding fisheries.

“Governor Ricardo Rosselló Nevares has not said a thing about us because he thinks the only ones who lost their means of production were the farmers,” said Naguabo fisherman Ángel Gómez Cruz, on behalf of the fishing community, at a meeting with government authorities convened to assess how to support producers of food. But are not fishers producers of food, especially on an island? 🐟

For more



<http://time.com/a-land-they-no-longer-recognize/>

A land they no longer recognize

<https://www.theguardian.com/world/2017/sep/21/caribbean-islands-hurricane-irma-maria-puerto-rico>

How the Caribbean islands are coping after hurricanes Irma and Maria

<http://escuelabuceocaribesur.blogspot.in/>
Centro Comunitario de Buceo Embajadores y Embajadoras del mar

Freedom from Modern Slavery

Only shared interest and mutual will—nationally, regionally, locally—among fishers and social partners can help achieve sustainable fisheries

18

The term ‘sustainable fishing’ is often associated with concepts related to ‘protection and management of fish stocks, prevention of overfishing, establishing fish quotas, and fighting illegal fishing’. Not many would think in terms of ‘people—planet—profit’, which would be more appropriate, especially in the context of the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO). Fishing becomes sustainable only when decent work for fishers is assured, responsible management of fish stocks is undertaken, and profit for the fishing vessel owner is achieved.

Unfortunately, ten years after its adoption the convention has been ratified by no more than ten flag States.

In marine fisheries, decent work for fishers—one of the pillars of sustainable fisheries—is linked to safety at sea. On the basis of the UN Convention on the Law of the Sea, the international community has agreed on several standards and guidelines for flag States to ensure safety at sea during fishing. These standards and guidelines cover: (a) construction, equipment and seaworthiness of fishing vessels; (b) training and certification of fishers; (c) manning of fishing vessels; and (d) labour conditions of fishers. The international standards usually apply to fishing vessels of 24 m in length or over. The guidelines cover smaller fishing vessels as well. Under international

law, in order to ensure safety at sea, it is a flag State’s duty to use these standards and guidelines when drafting its internal laws relating to fisheries. Unfortunately, where safety at sea in fishing is concerned, not many flag States fulfil their international duty—they do not ratify (and thus do not take into account) the international instruments available, even though they participated in the formulation of these instruments. It is difficult to understand why flag States do not ratify international instruments on safety at sea in fishing.

The International Labour Organization (ILO) has adopted several international standards regarding the working and living conditions of fishers on board vessels. These include the Minimum Age (Fishermen) Convention, 1959 (C112); the Medical Examination (Fishermen) Convention, 1959 (C113); the Fishermen’s Articles of Agreement Convention, 1959 (C114); and the Accommodation of Crews (Fishermen) Convention, 1966 (C126). None of these, however, has achieved widespread, worldwide implementation. Many countries have shown little interest in ratifying and implementing these conventions.

Progressive implementation

As the 20th century drew to a close, the ILO began to replace these conventions with one single convention covering a wide range of minimum standards that promote decent work for fishers. In June 2007, the International Labour Conference of the ILO adopted the Work in Fishing Convention, 2007 (C188), after the Conference had failed to adopt a convention on work in fishing in

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2005. Although the 2007 Convention offered several countries solutions for issues that had kept them from ratifying the earlier conventions, to date only ten countries have ratified C188. However, this relatively low number of ratifications was just enough for the Convention to enter into force on 16 November 2017. The European Union (EU) has adopted Directive (EU) 2017/159, which implements C188 into EU law for fishers who are employed (but not for self-employed and independent fishers) and for seagoing fishing vessels. It is hoped that by 15 November 2019, 28 Member States would have implemented the directive and thereby have an incentive to implement C188 as well in order to cover all of their fishers and seagoing fishing vessels.

C188 does indeed apply to all fishers on all fishing vessels engaged in commercial fishing, a term that covers all fishing activities with vessels at sea and in internal waters (such as lakes, rivers and canals), with

the exception of subsistence fishing and recreational fishing. The Convention sets minimum standards that can be applied to all types of fisheries in both poor and rich countries. These standards cover: responsibilities of fishing vessel owners, skippers and fishers; minimum age; medical examination; manning and hours of rest; crew list; fishers' work agreements; repatriation; recruitment and placement; payment of fishers; accommodation and food; medical care; occupational safety and health and accident prevention; social security; protection in the case of work-related sickness, injury or death; and compliance and enforcement. For fishing vessels of 24 m in length or over and for vessels remaining at sea for longer periods, the Convention sets some additional standards of a higher level.

Although C188 sets minimum standards aimed at widespread ratification and implementation, the 2007 International Labour Conference understood that countries and their

ILO



The ILO migrant fisher meeting: Tripartite Meeting on issues relating to Migrant Fishers, 18 - 22 September 2017, Geneva, Switzerland

fisheries sectors might still have difficulties implementing all of the Convention's standards fully or at once. The instrument therefore incorporates several mechanisms for flexibility. Certain provisions have built-in flexibility (for example, on vessel measurement, minimum age, hours of rest, and on contracting fishers). For countries facing problems of a substantial nature, certain provisions (for example, on medical certificates, crew lists, and risk evaluation) are allowed to be implemented progressively in compliance with an implementation time-plan drawn up in consultation with the fisheries social partners. Finally, there is also a general flexibility to temporarily exclude fishing vessels engaged in fishing operations in rivers, lakes or canals, or limited categories of fishers, from the entire Convention or from parts of it—for instance, if progressive implementation does not offer sufficient solutions.

The Convention's provisions on the fisher's work agreement and on food, potable water and crew accommodation are of special importance. Hence, in addition to the

little to fisheries' sustainability, even as pressure and demands on social issues relating to fisheries are increasing gradually. Yet, the instrument exists, ready to be used. Do we—the fishing sector—then have to wait until our governments are ready to fulfil their international duties? Can we not already start implementing parts of the Convention, while acknowledging that certain other, essential parts—like compliance and enforcement—can only be taken up effectively when governments prescribe the standards for fishing vessel owners, skippers and fishers to comply with, and carry out flag-State or port-State control?

If there is shared interest and mutual will—nationally, regionally or even locally—among social partners and members of fishers' co-operatives and partnerships to achieve more sustainability, some parts of Cr88 can perhaps be implemented voluntarily. This, of course, depends on the willingness and ability to identify, through social dialogue, the suitable parts for such preliminary 'self-implementation'. I say 'preliminary' because full implementation of Cr88 by fishing vessel flag States shall remain the goal. The standards the Convention sets should always be enforced by competent authorities and through a fair legal system, ensuring that violations of, and conflicts over, the execution of the standards can be brought before objective courts for settlement.

In September last year, the ILO organized a tripartite meeting on issues relating to migrant fishers. The meeting was quite successful and the outcome showed, once again, what can be achieved through social dialogue and a willingness to find solutions through co-operation.

Migrant fishers

The human and labour rights of migrant fishers are not always respected, denying them basic dignity and decency. In recent years, this has been brought into the open by the international media, worker organizations, UN agencies, NGOs and other stakeholders. Exact numbers are

The abuses heaped on migrant fishers from low-income countries often start in their home countries...

articles of the Convention, Annex II lists the details that a fisher's work agreement shall cover, and there is also Annex (Existing vessels do not have to be altered.) Some of Annex III's provisions hold additional requirements for larger, new fishing vessels with a deck. Annex III, too, contains flexibility mechanisms to help achieve widespread ratification (for example, the use of gross tonnage instead of length or length overall for a limited number of requirements).

Unfortunately, ten years after its adoption the convention has been ratified by no more than ten flag States and has, therefore, contributed



Participants at the ILO migrant fishers tripartite meeting showed, once again, what can be achieved through social dialogue and a willingness to find solutions through co-operation

hard to come by, but the widespread human-rights abuses reported were so unacceptable that the international community could not remain mute on the sidelines. The forced labour of 'modern slavery' manifested as: abuse of vulnerability; deception; restriction of movement; isolation; physical and sexual violence; intimidation and threats; retention of identity documents; withholding of wages; debt bondage; abusive working and living conditions; and excessive overtime.

The abuses heaped on migrant fishers from low-income countries often start in their home countries where they fall into the hands of *mala fide* crewing agents, recruiters or labour brokers (or anyone else in the trade who act as mediators between job-seeking fishers and vessel owners) or their middlemen. Invariably, recruitment and placement services for fishers and fishing vessel owners are not regulated in accordance with internationally agreed standards as those laid down in the Maritime Labour Convention, 2006 (MLC) or C188, nor with international guidelines for fair recruitment. As it turns out, fishers still have to pay to get a job aboard a foreign fishing vessel and they are often burdened with loans (to pay for food and lodging, transport, and 'care' for the family), which results in endless debt bondage to these agents. Fishers should be made aware that these practices are forbidden under

the international agreements and guidelines mentioned above. Fishing vessel owners and fishers should not deal with agents who cannot prove that they comply with the international standards and guidelines (for instance, through a valid certificate from a recognized classification society.)

One underlying cause for these problems is that most flag States and labour-supplying countries have not fulfilled their duty to ensure safety at sea in fishing through internal legislation that implements the internationally agreed standards designed for fishing. This is in contrast to what they did for shipping and seafarers. The 2017 ILO tripartite meeting invited member States to ratify and implement the standards, and invited UN agencies to develop a joint roadmap for effective promotion of these standards. The UN agencies, separately and jointly, have already developed, with great dedication, all kinds of valuable materials to assist countries and social partners, such as guidelines, handbooks, training materials, and a model gap analysis.

They also carry out excellent programmes for assistance in the field. Sadly, these commendable activities have not led to the deserved success in that the numbers of ratifications have not increased much. Clearly, there is now an additional need for a focus on high-level political and diplomatic efforts.

For more



<https://labour.icsf.net/>
ICSF website on Work in Fishing Convention

http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---declaration/documents/publication/wcms_515365.pdf

Fishers First: Good Practices to End Labour Exploitation at Sea

http://www.ilo.org/sector/activities/sectoral-meetings/WCMS_552792/lang-en/index.htm

Tripartite Meeting on Issues Relating to Migrant Fishers, 18 - 22 September 2017, Geneva, Switzerland

Differences Matter

The Norwegian experience shows that learning about sustainable small-scale fisheries development should not be a one-way traffic from the North to the South

From the very beginning, Norwegian development assistance has largely focused on fisheries. As a major fisheries nation that came naturally, Norway always ranked high among the world's fish exporters, so why not also export our management experience and fisheries technology—so seemed the official thinking. In hindsight, however, that has not always proven to be such a good idea, since failures seem to have outnumbered successes.

That should not come as a surprise. Transfer of technology and knowledge from the North to the South—whether from Norway or any other Northern country—is not straightforward. Fisheries development has never been

with regard to what makes fisheries sustainable. The answer is not at all clear. In the book *Angels Fear*, Gregory Bateson notes that we learn when we observe a difference that, in one way or another, makes a difference to us. A Norwegian fisheries expert who goes to Kerala would instantly spot differences. In the process, s/he not only learns something about Kerala, s/he also learns about Norway. Once s/he gets over the 'culture shock', s/he will start wondering: if it is like that in Norway, why not here? S/he will also ponder the reverse: if like this in Kerala, why not back home?

There are, of course, many similarities between Norway and Kerala. We largely share the same concerns: We want our natural environment and ecosystems to be healthy, and our livelihoods to be secure. We all care for our children, and want to live in dignity. Social justice is a concern in both places, and the same human-rights principles apply. In these respects, fisheries in the North and the South are the same, and they are no different from other industries. This is why the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) list them as basic principles, and why the Voluntary Guidelines on the Responsible Governance of Tenure talk about fisheries, forests and land in a similar vein.

Universals

As government and civil society organizations act on these general principles, they need to recognize what is unique about a country, a place and a fishery. They should, therefore,

The fix you suggest may not fit the problem. Solutions must always be adapted to context.

a quick fix and experiences from the temperate world are not necessarily relevant for the tropical world. It has been a long time since Norway initiated the Indo-Norwegian Project in the south Indian state of Kerala in the early 1950s. The pioneers of that decades-long and transformative project must have been convinced that the Norwegian expertise was indeed what Kerala needed. This turned out not quite entirely to be the case.

To say that fisheries in the North are different from those of countries in the South is to state the obvious. A wealth of academic literature tells us *how* they differ. The important question to ask, however, is what difference these differences make—for instance,

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never work from an assumption that they have seen it all before, that problems are the same everywhere, and that whatever tool they employ will work in the same way as in the North—where they often do not function so well either.

The laws of nature and those of society are fundamentally different. This difference also creates a huge divergence between the natural sciences and the social sciences. If I drop the pen I hold in my hand, it will fall to the floor wherever I am in the world, and it does so every time. If you know a bit of physics, you will know why. While the laws of nature are universal, the laws of society are human constructs designed in ways that are appropriate to context. Therefore, unlike the natural sciences, the social sciences do not deal in universals. Social scientists, like myself, do not assume, for instance, that a new rule, a particular management tool or a technical gadget will perform equally as well everywhere. We may have some clues, but that is all we have after having investigated the matter empirically. Social scientists are trained to be sceptical of technical fixes, because societal problems are

different from those in nature. They are typically “wicked”, as Rittel and Webber pointed out in their seminal 1973 article about planning (see the For more box below), and, therefore, do not easily lend themselves to quick fixes. Wicked problems are hard to define and ethically charged. Problems are also wicked because they are part of bigger problems—and we cannot be sure that we have solved them, since they have no finishing line. Small-scale fisheries confront managers with many problems of this nature.

This is pretty much what Garret Hardin argued in his famous article in *Science* about the “Tragedy of the Commons”. He did not talk about fisheries specifically, but when we read his example about the farmer, who, without limitation, increases his herd on the commons and eventually ruins it because every farmer is working according to the same logic, we easily conclude that this is exactly what happens in fisheries. (Still, we cannot know that for sure until we have checked it out empirically.)

But for Hardin, the tragedy of the commons was an illustration of another problem: the tendency among scientists to believe that the problems

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Trawlers at Neendakara fishing harbour, Kerala, India. Small-scale fishing people in the North, of course, enjoy the same human rights as their brothers and sisters in the global South, and they frequently refer to these rights as they criticize the government

they study always have a technical—or scientific—solution. Some problems, he argued, do not have a scientific solution because they challenge our ethics, norms and sense of morality. Poverty, according to Hardin, is such a problem. Poverty is also the example Rittel and Webber used to explain what a wicked problem is.

Scientists, nevertheless, trade in fixes or panaceas. We live in disciplinary bubbles where our tunnel visions only allow us to see one concern, be they conservation, economic efficiency, or local communities. Yet, as any fisheries manager would know from experience, fisheries management is about all these concerns, and more. If they were to focus only on one and be blind to others, they are doomed to fail. Neither can they address them sequentially. Since these concerns are linked, they must be addressed in an integrated fashion.

In 2006, together with colleagues of multiple disciplines (biology, economics and sociology), I published a paper titled *Painting the Floor with a Hammer* (Marine Policy, Volume 30, Issue 5). Here, we illustrated

In Norway, fishers were always involved in legislation, which often originated at the local level and within fishers' organizations...

our argument about panaceas in the form of individual transferable quotas (ITQs), marine protected areas (MPAs) and community-based management (CBM). While ITQs are the love children of fisheries economists, MPAs are the favourites of environmental biologists. Sociologists and anthropologists, on the other hand, are great advocates of CBM. These panaceas arise from the narrow interests that define our disciplines. Despite much talk about holistic and interdisciplinary perspectives, academics enforce discipline within their ranks. People who dare to deviate are penalized when they apply for jobs

or promotions or try to get published in journals.

A consequence thereof is also that we continue to produce, advocate and export panaceas. It does not take long for a new fix to get its own acronym, which we need to learn in order to understand what people in fisheries are talking about. These days you have to learn what RBA (Rights-based Approach), EBM (Ecosystem-based Management) and MSP (Marine Spatial Planning) mean.

These panaceas are each emerging from within the ranks of economists, ecologists and geographers. If you, as an engineer, are called in to help combat illegal, unreported and unregulated (IUU) fishing, the solution you are likely to come up with has another acronym: VMS (Vessel Monitoring System). The SSF Guidelines talks about HRBA—the human rights-based approach, which is where lawyers have particular expertise. Not only is this soup of acronyms brimful, but the size of the bowl keeps expanding.

In our paper about the hammers we employ for painting, we wanted to point to the risks that are associated with the implementation of panaceas if you do not know the context within which they are introduced. The fix you suggest may not fit the problem. You must also be open to the idea that your fix does not fix everything. In fisheries, there is no-one-size-fits-all fix. There is simply too much diversity. Solutions must always, therefore, be adapted to context.

Elinor Ostrom, the 2009 Nobel Prize winner in economics, argued that uncritically adopting panaceas is foolish. The title of Gregory Bateson's book plays on a line from an old poem by Alexander Pope (1711): "For fools rush in where angels fear to tread." We may well question the existence of angels but not of fools. We should be open to the existence of foolish angels in fisheries development and management as well.

Policy measures

While pursuing one concern, you may complicate the pursuance of another one that is equally important. ITQs

are good for economic efficiency, but bad for communities. MPAs may bring about conservation, but may exclude people from accessing their fishing grounds and thereby lead to more poverty. CBM empowers local communities, but does not address challenges at larger scales. MSP may facilitate ‘blue growth’, but may further marginalize small-scale fisheries. VMS may scare fishers from catching more than their quota, but cannot be the solution if poverty is driving overfishing.

Fisheries management and development cannot do without the natural sciences and their knowledge about issues that are universal, like ecosystem dynamics. This is the type of knowledge that Aristotle called ‘*epistēmē*’. Fisheries development and management also requires knowledge that he named ‘*technē*’, which we tend to associate with an engineer, a craftsman, and a bureaucrat.

However, there is a tendency of ignoring Aristotle’s third knowledge-type—*phronēsis*—sometimes translated as ‘prudence’. This is the deep understanding of the difference that context makes and what it means to be ethical. To be smart and clever is, we know, not the same as being wise. What we admire in political leaders is primarily the latter. We definitely want fisheries development and management policies to be effective, and for that, we need to be smart about technical solutions that are evidence-based. However, we also want our fisheries policies founded on reason and compassion, namely, *phronēsis*.

Northerners, like us Norwegians, showing up in the South as policy experts with a toolbox full of hammers, should make anyone uneasy. Policy is something that should be generated from below, not be imposed from the top down, and certainly not from the outside. Neither should it be a scientific exercise. The process should be transparent and inclusive—which is why there is now a literature on the concept of ‘inclusive development’.

This is how fisheries democracy has worked in Norway. Fishers were

always involved in legislation, which often originated at the local level and within fishers’ organizations, with government at the receiving end. Before launching a new policy initiative, the government, as a routine, would also consult these organizations, which the government helped form in the first place. This, I believe, is a model that is worth exporting.

Transfer of technology and knowledge from the North to the South—is not straightforward.

Norwegian fishers had (and have) critical opinions about fisheries policies, but they still assumed that government was honest, acted in good faith, addressed their concerns, and served their interests. For this reason, there is a level of trust between the government and the fishers, which, over the years, has paid off. I know of countries where the fishing population regards their government as their enemy. Not so in Norway, where the conflicts between government and fishers have been relatively few, and where it has been possible to enforce strict, but necessary, rules—for instance, pertaining to IUU fishing—without causing a revolt from fishers.

This has much to do with how we historically organized our industry and how the legislation enabled it. The Kerala project started at about the same time as the Norwegian Raw-fish Act became permanent law in 1951. The Norwegian parliament had also enacted the Temporary Fishers’ Ownership Act in 1950 (which became the Participation Act in 1972). While the former legalized the sovereign right of fishers’ co-operative sales organizations to fix minimum prices, the latter law determined that only active fishers have a right to own a fishing vessel.

A new paradigm

Both laws fundamentally changed power relations in the Norwegian

fishing industry in ways that have lasted to this day. Their relevance for implementation of the SSF Guidelines, I would argue, is that they also helped to bring the fishing population out of poverty. It took a couple of decades to develop this new legislation, partly because of the interruption of the Second World War. The New York stock market crash of 1929 hit the export-oriented Norwegian fishing industry and population hard.

Norwegians with even only meagre knowledge about the fishing industry know this story, but they may differ about its relevance today. That is not the point here. The question is rather about the relevance of what happened back then to the poor and marginalized Norwegian small-scale fishers to their counterparts in the global South today.

The question is also interesting from the perspective of the SSF Guidelines, which talk about the need for legal and institutional reform. In fact, when Norway endorsed the SSF Guidelines at the FAO Committee on Fisheries (COFI) meeting in June 2014, the delegate who spoke for Norway, mentioned the Raw-fish Act and the Participation Act.

A caveat is, however, in order. As part of the Kerala project, the Norwegians also tried to introduce our raw-fish sales organizations, but they apparently underestimated the power of the local fish merchants. In reflecting on this experience, social scientist John Kurien, who is a native of Kerala, points out that there is a major difference between creating new organizations of fishers, as with the sales organizations in Norway, and for fishers, as happened in Kerala.

This is a difference that the different approaches to fisheries development make. It is also a difference that different contexts make. I believe in the power of example, not because examples are easily replicated, but because they can be a source of discovery and inspiration. The more examples we have, the more we learn about alternative ways of doing things. But learning is only possible if we are

willing to leave behind the prejudgment that comes with the panaceas and prejudice that follow the disciplines.

With their emphasis on “food security and poverty eradication”, the SSF Guidelines are particularly meant for the global South. This does not make them irrelevant in the North. Since small-scale fisheries people in the North seem to be on the path of extinction, one could even make the case that their impending demise makes the SSF Guidelines especially relevant.

Small-scale fishing people in the North, of course, enjoy the same human rights as their brothers and sisters in the global South, and they frequently refer to these rights as they criticize the government. When, for instance, indigenous people in the North, like the Norwegian Sami, argue for their fisheries rights, they do so by invoking the UN Declaration of the Rights of Indigenous Peoples. The SSF Guidelines and the Tenure Guidelines strengthen their case.

Small-scale fishers in Norway and throughout the Arctic should learn what these Guidelines say about tenure, communities and gender, for instance. Norwegian fisher organizations should also follow their implementation around the world. If they pay attention, which I am not sure they do yet, I feel confident that they will conclude that the SSF Guidelines are also meant for them. Thus, I do believe that learning about sustainable small-scale fisheries development should not be a one-way traffic from the North to the South. 3

For more

https://www.jstor.org/stable/4374540?seq=1#page_scan_tab_contents

Technical Assistance Projects and Socio-Economic Change: Norwegian Intervention in Kerala's Fisheries Development

<http://toobigtoignore.net/>
Too Big To Ignore

Recognize Tenure Rights

Formal recognition of marine tenure provides an incentive for small-scale fishers to form and support the overarching structure for responsible governance

Responsible governance of tenure is a central component of the Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). One key issue for small-scale fisheries is tenure rights, which the SSF Guidelines stress must be designed from a broad human-rights perspective that takes into account the local complexities of small-scale fisheries.

The SSF Guidelines urge States to adopt national legislation to strengthen responsible governance of tenure of land, fisheries and forests to ensure that small-scale fishers, fishworkers and their communities have secure, equitable and socially and culturally appropriate tenure rights to fishery resources, fishing areas and adjacent land. Formal recognition of marine tenure provides communities with the security needed to invest in, and manage, their fishery resources for long-term sustainability.

Granting preferential access to fish and water through the creation and enforcement of exclusive use zones and effective and transparent mechanisms, and addressing resource-use conflicts are needed to protect the rights of small-scale fishers. Formal recognition of marine tenure also provides an incentive for small-scale fishers to form and support the overarching governance structure, such as co-management, to manage the tenure rights. The countries of Asia are at different stages in recognizing and supporting marine tenure and in establishing and implementing co-management.

Bangladesh: There is no identification of marine tenure.

This is in contrast to inland fisheries in the country where there is a considerable experience on fisheries tenure. There is also no mention of traditional/customary marine tenure institutions for marine fishing. It is possible that community-based marine tenure institutions exist in coastal areas of Bangladesh, but these have not been formally documented. While community-based fisheries management (CBFM) for inland waters is well established in Bangladesh, CBFM for coastal and marine fisheries is almost non-existent, with only few examples of its use.

Regimes are threatened, however, by a range of local and external factors, many of which are beyond the capacity of local institutions and communities to address.

Cambodia: Community fisheries in Cambodia, as defined by law, is fisheries co-management. The co-management of community fisheries is a partnership between fishers and the government, represented by the Fisheries Administration. Fisheries tenure is undertaken through the Community Fishing Area Agreement and management plan signed between the Fisheries Cantonment Chief and the community fisheries committee, which stipulates the management of the fishing area by the community fisheries members.

Indonesia: No specific existing laws directly establish exclusive access rights to fisheries for local fishing communities. The idea of exclusive use rights in Indonesia is contentious. Article 60 of Law No. 1/2014

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introduces exclusive access rights for communities with traditional rights (*masyarakat hukum adat*) and indigenous communities (*masyarakat tradisional*), but the article only recognizes the rights of these two communities to propose traditional/indigenous community rights in fishing grounds into coastal and small islands zoning plans.

While a great variety of customary laws and marine tenure practices are found throughout Indonesia, except for a few locations, such as Papua, West Papua, and the Maluku region of Eastern Indonesia, the principle of local customary marine tenure is not widely recognized. There is no specific law in relation to fisheries co-management in Indonesia. However, since the early 1990s, when the concept of co-management was introduced in Indonesia, it has become a common principle and practice for fisheries management. It is generally accepted that Fisheries Law No. 31 of 2004 provides a mandate to implement fisheries co-management through eight fisheries management principles that support co-management and the role of local/traditional management and indigenous knowledge. Law 31/2004 was amended through Law 45/2009 to include three additional principles of togetherness, self-sufficiency and sustainable development.

Philippines: The 1998 Fisheries Code is considered a breakthrough in fisheries legislation because it “returns” the management of municipal waters from national to local governments. Fishers are given the opportunity to formally participate in co-management through, among other means, the Fisheries and Aquatic Resources Management Councils (FARMCs). The FARMCs are mandated to carry out a number of management advisory functions in close collaboration with the local government unit (LGU). The implementation of effective co-management practices at multiple scales of governance is proving to be an important approach to enabling shared authority over coastal and marine resources. Registered fishers and co-operatives have preferential rights to the fishery privileges issued by the LGU. The Indigenous People’s Rights Act (IPRA) requires the State to not only respect, recognize and protect the rights of Indigenous Peoples but also to preserve and protect their culture, traditions and institutions. Legal instruments, such as the Certificate of Ancestral Domain Title and Mangrove Stewardship Contracts, now also exist to give coastal communities a semblance of tenurial security. These instruments likewise encourage communities to take charge of resource management planning and implementation. Not all LGUs are recognizing and protecting legitimate tenure rights. While all LGUs are required to have a Coastal Resources Management (CRM) plan, including a fisheries management plan which recognizes tenure rights, there may be no implementation. Much of the recognition depends upon the priorities of the mayor.

Vietnam: At the end of 2017, Vietnam approved an amended fisheries law (Law No. 18/2017/QH14) that specifically supports co-management in the protection of fisheries resources in the country. Community organizations shall be recognized and authorized to manage the protection of fisheries resources. The new law also allocates/delegates fishing rights to the community

USAID ECOFISH PROJECT



Selling of reef fish in Coron, Palawan, Philippines. Tenure systems are facing increasing stress from booming markets, growing consumption and population growth

organizations. While the law and policies have stated the importance of fishing rights, there is not yet a clear legal framework document that explicitly provides an outline of what fishing rights are, and who has rights to which areas, both coastal and inland.

Securing Tenure Rights for Small-scale Fisheries

Experience and research continues to reinforce a key message that secure community-scale marine resource tenure and governance regimes can produce lasting and positive social, cultural, economic and ecological outcomes. These regimes are threatened, however, by a range of local and external factors, many of which are beyond the capacity of local institutions and communities to address. Tenure systems are facing increasing stress from booming markets, growing consumption, population growth, environmental degradation and climate change reduce the availability of land, fisheries and forests. In the face of such pressures, insecure tenure rights can often result in extreme poverty and hunger.

With the increasing pressure from external drivers and threats, there is an urgent need to legally recognize existing customary, indigenous and informal tenure rights, before they are permanently lost. Mapping the geographic extent of existing marine tenure regimes is needed to support legal recognition, and may also help to increase awareness of these regimes, and support compliance with local rules to restrict use and exclude outsiders as well as reduce infringement on rights.

In addition to sea tenure, there is an urgent need to recognize land tenure for small-scale fishers. In those countries where decentralization of fisheries management authority has not been effective in controlling access, further devolution of resource-use rights and responsibilities to local stakeholders provides the communities with the incentives for sustainable resource use as long as macro-scale issues are addressed through effective co-management arrangements.



Drying fish to sell in San Fernando, Philippines. Secure community-scale marine resource governance regimes can produce positive social, cultural, economic and ecological outcomes

There are a number of programming opportunities that highlight the need for multiple entry points and scales of intervention. These entry points highlight the need for a more holistic approach to (a) record and recognize the contribution small-scale fisheries to the sector at local and national levels; (b) develop coherent national and local policies and laws that support tenure and governance of small-scale fisheries; (c) defining and enforcing preferential use rights of nearshore waters to small-scale fishers, which helps tip the balance toward more equitable access to fisheries resources for coastal communities; (d) strengthen community-scale marine tenure institutions; (e) improve the capacity, effectiveness and direction of accountability of co-management arrangements to support community-based institutions; and (e) embed community-based management in an ecosystem approach to fisheries management. 3

For more

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The Siem Reap Meet Proceedings: Asserting Rights, Defining Responsibilities: Perspectives from Small-scale Fishing Communities on Coastal and Fisheries Management in Asia

<http://www.tambuyog.org/home/>
Tambuyog Development Center

<http://mcdvietnam.org/en/>
Centre for Marinelife Conservation and Community Development (MCD)

Lake Ties

Fisherfolk use their social networks to navigate formal and informal rules in accessing the fisheries of Lake Victoria

Access to the fisheries of Lake Victoria in East Africa is often described as 'open', meaning that anyone can join the fisheries, but in both policy and practice, there are a number of formal measures and informal rules that have to be navigated to work and trade in the fisheries. Fisherfolk make use of their social networks to help them through this myriad of formal and informal rules and processes.

Lake Victoria is the second largest freshwater body in the world, supporting the livelihoods of millions of people in the three countries bordering the Lake (Kenya, Tanzania and Uganda) through income, food

919,310 tonnes, valued at US\$840 mn at the beach level. However, there has been much concern about declining stocks and catches of Nile perch since the early 2000s, attributed to high fishing pressure, the prevalence of illegal fishing and ecosystem degradation.

This concern has led to the adoption of measures to manage, and potentially limit, access. However, access is not yet limited though there are many formal and informal systems and rules that mediate access to the fisheries, and these are set out here as including the co-management system, boat licensing and social and economic ties between fisherfolk. The article also reflects on how movement between landing sites affects access, and how women negotiate access to fish, before identifying cage farming and efforts to manage capacity as activities that may affect fishers' access to the Lake.

However, the installation of cages is controversial, with fishers concerned that their access to the Lake is being taken away from them as shorelines are closed off.

and water. There are three main commercial fisheries: Nile perch, most of which is processed and exported through processing plants; Nile tilapia, serving mainly the domestic and regional markets; and, *dagaa*, a small sardine-like fish which is widely used in the region and exported to other African countries for both human and animal consumption.

The Lake is managed by the national fisheries departments which co-ordinate their plans and measures through the Lake Victoria Fisheries Organization, which is a structure of the regional intergovernmental organization, the East African Community (EAC). The latest Fisheries Management Plan for the Lake reports an estimated total catch in 2014 of

Co-management and access

A system of co-management was introduced in the three countries from the late 1990s, initially supported on Lake Victoria by the World Bank-funded Lake Victoria Environmental Management Programme. The introduction of co-management primarily involved the formation of community-based Beach Management Units (BMUs). Guidelines and legislation require a BMU to be formed at all landing sites with at least 30 boats; those with fewer boats join with other sites to form a BMU. Everyone working within fisheries at a landing site is required to be a member of a BMU. Accessing the fisheries, therefore, requires fisherfolk to be a member of a BMU, and a register of members should be kept by each BMU.

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Access to the fisheries is formally through applying for a licence to operate. Licences are required to take a boat out to fish, and to use a boat to collect and transport fish. Licences are also required to process, trade and transport fish on land. Responsibility for issuing licences rests with the government. In Kenya, the State Department for Fisheries is responsible for issuing licences, which it does through the County Fisheries Officer. Central government is also responsible for licensing in Uganda, with the fees kept by the Department of Fisheries Resources for the sector. A register of everyone issued with a licence should be maintained and a certificate issued, together with a fishing vessel identification plate. In Tanzania, boat licences are issued by local government for vessels below 11 m in length. Various restrictions apply with regard to boat licences, such as keeping within fishing regulations, and licences cannot be transferred.

There is no limit to the number of licences that can be issued and so licences are seen as a way of raising revenue from the fisheries. However, although licensing is supposed to take place on an annual basis, there have, at times, been considerable delays in issuing licences in Uganda and uncertainty in Kenya since the introduction of the county government system following the 2010 Constitution over which level of government should have the responsibility for issuing licences. The cost of a licence is not prohibitive, and fishers are more likely to be arrested and sanctioned for fishing illegally as are traders/processors dealing in undersized fish than fishing or trading without a licence. They can, however, be sanctioned for not having a licence and a bribe may be offered or sought in lieu of a sanction.

The 2016-2020 Fisheries Management Plan for Lake Victoria sets out a number of measures to be developed to improve the licensing system and to work towards controlling access. These are: the development of harmonized fishing craft registration and licence registers;

introduction of Species Specific Licensing for Nile perch; and, the development and piloting of regional guidelines for a user rights-based management system. It is then possible that the system of accessing the Lake fisheries will change over the coming years.

Access to the fisheries is not solely down to paying for a licence. For boat owners, access requires the purchase of a boat and gears, which often relies on access to credit. This credit is generally provided by fish agents, who buy fish on behalf of the fish-processing factories and provide credit to boat owners in exchange for a reliable and long-term supply of Nile perch. For boat crew, access to the fisheries is made possible through employment by boat owners. Employment relies upon good relations with the boatowner, as the owner must trust the crew with their boat and gears and to return with all of the catch. Boat crew also rely on friends for recommendations to boat owners, particularly when moving to a different landing site.

Access and migration

Around half of the boat crew are believed to move between landing sites, in search of higher catches and prices. Boat crew do not always move with a boat but seek work with a different boatowner on arrival at a

FIONA NUNAN



Sorting a catch of Nile perch. The credit is generally provided by fish agents, who provide credit to boatowners in exchange for a reliable and long-term supply of Nile perch

FIONA NUNAN



Boats parked up on island landing site. Employment relies upon good relations with the boatowner, as the owner must trust the crew with their boat and gears

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landing site. Migrants are expected to carry with them a letter from the leader of the BMU at the landing site they have left, which they present to the leader of the BMU at the new landing site. Such a letter should confirm their identity and good character. Access to employment as fishers move around the Lake also depends on social networks, with boat crew relying on contacts in accessing information on fish catches and prices and in making new connections for employment and housing.

Lake Victoria fisherwomen

Women make up around a quarter of the people working in fisheries at the beach level, with the majority of women engaged in processing and trading fish, particularly tilapia, *dagaa* and undersized Nile perch. Access to fish relies on establishing good relationships with boat crew and boat owners. This may result from marriage, with women fish processors and traders buying fish from their husbands. Alternatively, credit or gifts, such as cigarettes, may be provided to crew to persuade them to sell their fish to those providing the gifts. The practice of 'fish for sex' is also found on Lake Victoria, where sex is exchanged for access to fish. This practice has been associated with high levels of HIV/AIDS around the

Lake, as well as with alcohol use and boat crew migration.

Two key challenges may affect access to the fisheries of Lake Victoria in the coming years. These are the introduction of cage farming on the Lake, and plans to manage fishing capacity. In terms of cage farming, allowing private investors to establish cages in the Lake is in line with the increasing attention given to aquaculture in the region, and seeing the adoption of aquaculture as a solution to declining catches in capture fisheries. However, the installation of cages is controversial, with fishers concerned that their access to the Lake is being taken away from them as shorelines are closed off. The Regional Plan of Action for the Management of Fishing Capacity on Lake Victoria (RPOA-Capacity), agreed in 2007, aims to introduce a number of measures to manage and—in the case of Nile perch—control, fishing capacity. Some of those measures can be found in the latest Fisheries Management Plan, but measures to control or limit fishing capacity remain contested, given the lack of alternative livelihood sources in the region.

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Community Cohesion: Social and Economic Ties in the Personal Networks of Fisherfolk

Mealy Deal

For West African artisanal fishing communities, the fishmeal boom may be a bonanza for a few, but is a curse for most

With an increased demand for fishmeal and fish oil in the major world markets, which offer very remunerative prices, fishmeal factories are multiplying in West Africa. In Senegal, there are now more than a dozen officially registered fishmeal plants—and some more operating clandestinely. In Mauritania, their numbers have exploded over the last few years, reaching 29 plants by end 2015. In The Gambia a first fishmeal plant has begun operating, while a second one is being built.

Last September, at the initiative of the Senegalese artisanal fishing platform CONIPAS, together with the local support association APRAPAM, a regional forum was held where fishing communities, environmental associations, scientists from Mauritania, Senegal and Gambia shared their experiences and concerns about fishmeal production in West Africa. The initiative was supported by the African Confederation of Artisanal Fishing Organizations, which now gathers fishing organizations from 24 African countries, many of which are worried about the boom of fishmeal production in West Africa.

Indeed, nowadays, fishmeal factories are using an increasing amount of fresh fish, in particular sardinella. Round sardinella are the most abundant species among small pelagics in the region, most of which are shared between Mauritania and Senegal. Average annual catches of sardinella in Northwest Africa are around 600,000 tonnes. In 2013, in Mauritania alone, more than 300,000 tonnes of small pelagic fish were sent to fishmeal factories.

Round sardinellas are showing signs of overexploitation in the

region. The Food and Agriculture Organization of the United Nations (FAO) Working Group on small pelagics, composed of experts representing the coastal States as well as countries fishing in the sub-region, has recommended, for several years, the reduction of fishing effort on this resource. However, this seems like an insurmountable task, in the absence of concerted regional management of small pelagics. Instead, fishing pressure is growing, fuelled by the increasing demand for small pelagics to be used for fishmeal.

...the anarchic development of the fishmeal industry threatens fishing communities' health and access to fish as raw material...

The round sardinella, and small pelagics in general, are a staple food for West African coastal communities, providing proteins, vitamins and amino acids. Worryingly, as was described in a research report published in 2014, the contribution of small pelagic fish to people's diets throughout West Africa is in decline. Between 2004 and 2014, at least 1.7 mn tonnes of small-pelagic fish caught off Northwest Africa, from Mauritania down to Guinea, was landed for direct human consumption.

Dwindling catches

Yet there has been a steady decline in catches. The report predicts that by 2025, the gap between demand and supply may reach 3.3 mn tonnes, if the aim is to sustain fish consumption at the 2012 level. In this context,

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FAO / FRANCO MATTIOLI



The catch of sardinella is being sucked up by pump at the unloading pier at Djifer, Senegal. Nowadays, fishmeal factories are using an increasing amount of fresh fish, sardinella

the expansion of the production of fishmeal is a threat to regional food security.

For the West African consumer, the scarcity is already apparent with the soaring prices of sardinella sold on the beaches. Indeed, fishmeal production plants turn increasingly to fresh sardinella caught by both industrial and artisanal vessels, competing with women who process the fish to supply the local markets for human consumption. "All these factories feed on fresh fish, mainly sardinella, often with the help of our fishermen", says a woman fish processor who attended the forum.

More and more, women are struggling to get fish for processing and they see their businesses grinding to a standstill.

Fishmeal factories send people to buy directly on the beaches, offering fishermen higher prices than fishmongers. In Saint Louis (Senegal), there is only one fishmeal plant owned by a Chinese company. It buys its fish directly at the landing site.

Fishmeal factories

A fisherman explains that they offer between 3,000 and 4,000 CFA francs per box of 50 kg (USD 1=CFA534). The fishmeal is sold abroad (in Asia and

Europe) or locally for the production of animal feed, for industrial poultry farms or for aquaculture.

In a place like Saint Louis, many fishers feel they do not have any alternative other than to sell to the factory, as the local processing and distribution channels are not developed enough to absorb the quantities of fish they land in some seasons, when small pelagics are abundant. When sardinella is abundant, the fishmeal plant can buy up to 100 tonnes a day. But in the low season, it sometimes happens that the plant almost stops its activities.

If some fishers find it lucrative to sell to the fishmeal factories, many in the sector argue that the fishmeal industry develops at the expense of jobs in artisanal fisheries. The activities associated with sardinella fisheries, artisanal processing and distribution of processed fish, are characterized by low barriers to entry in terms of capital, skills and knowhow.

In Senegal, a single artisanal purse seine catching sardinellas can give jobs to more than a hundred people—not just those active in processing, transport and distribution of processed fish products, but also boat builders, net makers, and so on, each of them with a family to feed, points out Gaoussou Gueye, from the association APRAPAM. About 20 per cent of the 60,000 fishers in Senegal fish exclusively for sardinella.


In 2015, the Senegalese Research Centre CRODT identified more than 2,000 artisanal purse-seine *pirogues*, that account for more than 200,000 people living off the fishing activities of these units. In comparison, a fishmeal production plant offers a few dozen jobs.

Fingers are also pointing to fishmeal factories as sources of pollution and health problems. The factories release toxic wastes into the sea. Thick smoke from factories pollute the air. This smoke is the cause of many diseases. Mokhtar Ould Amah, a Mauritanian ENT doctor, explains that air pollution, due to the fishmeal factories in Nouadhibou, propagated numerous pathologies such as allergy, asthma and respiratory

disorders, especially in children and people with chronic diseases. “These plants are a serious threat to public health”, he insists.

In Senegal, the press recently reported the discomfort caused to the local population by the fumes coming out of a fishmeal factory near Mbour, which eventually exploded, causing fatal casualties.

In Gambia, in September 2016, a Chinese fishmeal factory was opened in Gunjur, a village very close to the capital city of Banjul. It was hoped that the factory would create much-needed jobs. However, a few months later, the villagers began to notice foul smells coming from the factory, and pollution that caused water to turn red. Taken to court, the company, Golden Lead, had to pay US\$25,000 as penalty and take immediate measures to treat its wastewater.

The forum in Senegal was an opportunity to set up an informal network that will continue to mobilize people around this issue, sharing information, campaigning and raising awareness with the authorities and the fishers themselves. Evidently, the anarchic development of the fishmeal industry threatens fishing communities’ health and access to fish as raw material for processing, thus jeopardizing food security. 

For more



<http://www.cape-cffa.org/>
Coalition for Fair Fisheries Arrangements (CFFA)

<https://www.icsf.net/en/samudra/article/EN/77-4319-The-Black-Hole-.html>
The Black Hole in the Seas

<http://cape-cffa.squarespace.com/new-blog/2017/8/29/fishmeal-production-in-west-africa-issues-for-coastal-communities>
Fishmeal Production In West Africa: Issues For Coastal Communities

Free to Move

Belize, a pioneer in fisheries conservation, has become the first country to adopt a national, multispecies territorial user rights programme

Belize has always attracted great environmental attention, especially since the country boasts having the second largest coral reef complex in the world, which stretches 185 miles, making it the longest in the Western hemisphere. For the average Belizean, it is national pride to protect the country's ecosystem. For some, it is an attraction for investments and tourism development. In the midst of this, there are the small-scale fishers who depend on the marine resources for a livelihood.

Compared to its Caribbean friends, Belize has always been pioneers in fisheries conservation. No exceptional

How is the new regime being managed in Belize? As described by a fisher, there is a Manage Access Committee created for each fishing zone. This committee comprises stakeholders, including fishers. The committee is responsible for the management of a specific fishing zone. It vets and approves the 'manage access' fishing licences. A licensed fisher is limited to two fishing areas. When a fisher leader, who is a member of the committee, was asked if it is possible to change fishing zones, he said yes, subject to the case going to the committee. However, if that fisher has had a previous offence, it would be difficult to change fishing zones.

Another woman fisher, replying to the same question, stated that designating two zones in the first instance would be difficult. The zones are over-populated and there is less space to fish. A lot of the good fishing areas are being protected and are no-take zones.

Further responses to this question revealed that fishing communities were unable to find out who has licences to fish in their waters. "We should be able to access the list of licence holders and be able to verify that these people legitimately deserve to hold a licence", observed a fisher. While a fisher gave the example of a red tide (a rare occurrence for Belize) and another spoke about hurricanes, they both shared the same view about the fate of fishers during the time of natural disasters, where some areas are more affected than others.

Tenure rights

Will they be allowed to venture into other zones freely and easily? A community of fishers felt that, at times, the powers that be do not fully

It seems as if they are aware that our waters are being exploited by foreigners, who do not have licences!

surprises, then, when, in 2011, the Fisheries Department, in collaboration with the Environmental Defense Fund (EDF) and other non-governmental organizations (NGOs), launched a Manage Access Pilot Project (MAPP) in the general-use zones of the Port Honduras Marine Reserve and Glover's Reef Reserve. Then, in 2016, there was a national roll-out where the 3,000 traditional fishers were divided into nine fishing zones. This was a world record breaker, as Belize became the first country to adopt a national, multispecies territorial user rights programme. For this article, a small sample of fishers and co-operative workers were briefly interviewed about the MAPP in Belize. They spoke about areas of governance, enforcement, fishing and tenure rights.

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appreciate the input of the fishers as they would initially contribute in the consultations but often find that changes are made that they are not aware of or did not agree to. They also think that some of the processes are cumbersome—for example, the acquisition of licences. They have to spend a day going to Belize City to get these licences. A day lost means spending money and not making any.

One fisher claimed that all the fisheries-management tools were in place in some fashion or the other, prior to the access-management regimes. For example, he remembered how many years ago, the fisheries division used to collect data from fishers at the fishing co-operatives and, even more recently, the co-operatives collect data when they are invoiced, including those related to fishing grounds, etc. Essentially, that earlier system was even better because, as reported by many fishers, they were having great difficulties with the Manage Access logbook system for collecting catch data. The fisher suggested: “I could tell them, keep all the management tools and just take away the zoning, but they would not agree.” I was curious to know why he made such a statement. He elaborated on behalf of the other fishers who fish in many different areas of Belize, from north to south, how the zoning affects their free movements to access different fishing areas.

Enforcement is one area of the programme many fishers welcomed. A few commented that patrolling will check piracy at sea. In addition, they said, it will prevent illegal fishing by non-Belizean fishers. Moreover, local fishers are accustomed to the fisheries regulations such as open and close seasons/size limits for prime species as lobster and conch; most are, therefore, accustomed to complying with the regulations. One fisher interviewed spoke about witnessing large overseas fishing vessels fishing far away in the deep sea at night. These vessels are so big they light up like a city. He said given an opportunity, those large vessel owners would also be interested in the traditional areas of the Belizean artisanal fishers.

One community of fishers wished that enforcement should not be selective. “It seems as if they are aware that our waters are being exploited by foreigners, who do not have licences! Even when reporting to the authorities that there is not enough being done to stop illegal fishing, the authorities claim they do not have the resources”. Another fisher leader commented: “I see other boats that are not coded for my zone fishing in the area. We need to ensure we have sufficient patrols”. Several fishers pointed to the need for more awareness and information sharing about the fishing regulations.

On the topic of fishers’ and tenure rights, one person commented that fisherfolk need to be organized and have a team of qualified advisers. He further stated that the NGOs and other organizations should have a full team, including lawyers, executive directors and trained specialists; likewise, the fishers of Belize need strength and people on their team 24 hours a day, seven days a week to help fight and defend their rights. This interviewee went on further to quote the Constitution of Belize, which speaks of the freedom of movement and suggested that fishers should be knowledgeable about all

EDEN LEON



Sail boats docked at a fishing cooperative in Belize. The fishers want management that is fair, equitable, transparent and reliable, which includes meaningful community consultations

EDEN LEON



Lobsters in a fishing processing plant in Belize. Local fishers are accustomed to the fisheries regulations such as open and close seasons/size limits for lobster and conch

laws, regulations and policies that affect their well-being.

I took the opportunity to give him a copy of the Food and Agriculture Organization of the United Nations (FAO) Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) and highlighted Part 2 Responsible fisheries and sustainable development. Here it states that *“small-scale fishing communities need to have secure tenure rights to the resources that form the basis for their social and cultural well-being, their livelihoods and their sustainable development”*.

Another response on the topic was from a woman fisher who spoke strongly for alternative livelihood opportunities in Belize. She stated that there are barely any marketable products and she observes a lot of control over fisherfolk. Feeling compelled to provide for her home, she is interested in anything that can bring an income to her and her family.

Another commented that there is also the anxiety that their fishing grounds are shrinking, often to accommodate the tourism industry: “We allow outsiders to come and dictate when/where fishing should be done without regard for the legitimacy of fishers using these resources to make a living.” Jackie Sunde, in her abstract “Expressions of Tenure in South Africa in the context of the Small-Scale Fisheries Guidelines”, says

that tenure relations lie at the heart of the livelihoods of small-scale fishing communities who depend on their access to, and control of, fisheries and other natural resources in order to realize their right to food as well as a range of other human rights.

Fishers want a sustainable fishing industry, and some are willing to place some confidence in the new fisheries initiative in Belize. When a seasoned fisher was asked about his views about Manage Access, his response was: “You (pointing to me) will have to monitor it”. This was understood to mean that the initiative is in its infant stage, and different stages will produce different challenges. Meanwhile, fishers cling on to the hope of better profits and an improved fishing industry.

My overall assessment, after discussions with some fisheries experts of Belize, is that the fishers of the country want management that is fair, equitable, transparent and reliable, which includes meaningful community consultations. In addition, the social and cultural issues of fishers must not be ignored in the process. Clearly, fishers are not asking for fisheries conservation in the guise of fisheries management. As stated in the Caribbean Network of Fisherfolk Organisations’ vision, all fishers want is to have sustainable fishing industries that are mainly owned and governed by fisherfolk who enjoy a good quality of life, achieved through the ecosystem-based management of fisheries resources.

For more

http://dlc.dlib.indiana.edu/dlc/bitstream/handle/10535/2157/Gray_141801.pdf?sequence=1

Producing Success: Co-Management of a Marine Protected Area in Belize

<http://www.cirp.org.tt/cnfo/>

The Caribbean Network of Fisherfolk Organisations (CNFO)

Staying Afloat

The experience with tourism-based boat trips in Caixa d'Aço Bay in Paraty, Brazil, highlights the problems of livelihoods in restricted-use protected areas

The concept of development has been discussed since the early stages of civilization and varies according to the epoch and philosophical currents. Although society has advanced in sustainability and human well-being issues, in practice development remains based on economic growth, capital accumulation and social inequalities. Dominant ideologies in development concepts are followed by an emblematic factor—the inability of an economy to generate decent employment and to provide access to resources at different levels.

Despite the process of decolonization, indigenous peoples and descendants of slaves in Latin America have been largely excluded from the process of development. With the economy unable to generate decent employment and provide access to resources at different levels, the search for informal jobs has become a common practice, especially among traditional communities in underdeveloped areas who, faced with the lack of formal employment opportunities, struggle to preserve their livelihoods. Part of these initiatives come from the social logic of promoting community ties and reinforcing solidarity and co-operation among community members.

Traditional communities living in protected areas are currently faced with the threat of restrictions in access to land and natural resources, forcing changes on patterns and sources of local livelihoods. Community empowerment and capacity building are essential to deal with this reality and to ensure fundamental rights, and social and cultural reproduction aligned to environmental conservation.

In this context, the efforts of the Association of Small-scale Fishermen and Boatmen of Trindade (ABAT) in Brazil to ensure local access to marine traditional territories and to maintain their livelihoods in a restricted-use protected area are worth examining.

The Caiçara community of Trindade is located in the municipality of Paraty, in the south of Rio de Janeiro, Brazil. Part of the traditional land is located inside the Serra da Bocaina National Park (PNSB), including Caixa d'Aço Bay, an important marine area for artisanal fishing and tourism. The PNSB is a no-take protected area established in 1971.

Despite the process of decolonization, indigenous peoples and descendants of slaves in Latin America have been largely excluded from the process of development.

Until the 1960s, families used to engage in artisanal fishing, small-scale agriculture and animal husbandry. Tourism has increased in Trindade as a result of federal development policies in the 1970s, and has become an important activity for the local economy since 1990.

Livelihood diversification

Due to the restrictions in the use of natural resources at the PNSB, a group of fishermen identified an opportunity to diversify their livelihood through the implementation of boat trips in three beaches: de Fora, Meio and Caixa d'Aço Natural Pool. The boats, which were until then used only for fishing activities, have since been also used to transport tourists. Boat trips were carried out individually

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PAULA CHAMY



The efforts of ABAT fishermen and boatmen to ensure local access to marine traditional territories and to maintain their livelihoods in a restricted-use protected area are interesting

until 1996, when the boatmen and fishermen created ABAT, aiming to establish collective rules for artisanal fishing and community-based tourism. Fishing is the basis of the Caiçara culture and a fundamental activity for fishermen and boatmen. Of late, boat trips have become a substantial part of the local community members' income, being as, or more, important than fisheries. This tourism activity currently takes place inside the PNSB and nearby localities.

The formalization of tourism activities in national parks is in conformity with the objectives of the protected area category and involves a series of steps. To this end, ABAT has been carrying out numerous actions to ensure right of access, permanence and autonomy of boat trips inside the PNSB, with the support of universities, technical experts and funding agencies.

In 2010, the PNSB released a Letter of Intent (LoI) establishing rules and standards for the formalization of boat trips, including safety measures and training requirements for the boatmen. The LoI also attested that both PNSB managers and ABAT members are co-responsible for the boat trips inside the PNSB, characterizing the beginning of a legislative process of this activity.

Due to the impossibility of meeting all requirements, the LoI was not signed by ABAT members. The formalization process stagnated until

November 2012, when a working group was formed by PNSB managers, representatives of ABAT and partners. Since then, after discussions, an authorization term between ABAT and PNSB to regulate the boat trips has been introduced.

Among the legal instruments that regulate visits to protected areas in Brazil—authorization, permits and concessions—authorization is the most fragile since it can be suspended at any time. On the other hand, it is the most feasible for community-based enterprises that do not have funds to compete with large corporations attracted by the tourism potential of the region. As a result, there are social and labour exclusions in the area.

The demand for the authorization of boat trips encouraged two consultants (co-authors of this article) to support ABAT in the collective planning and execution of an outreach project carried out between 2015 and 2016. This project received financial aid from Casa Social-Environmental Fund and worked along three lines of action: institutional strengthening; basic cost-benefit analysis of boat trips; and capacity building focused on traditional people and tourism activities in laws pertaining to conservation.

All the strategies developed (four workshops to formulate the basic cost-benefit analysis, and four other workshops to discuss specific regulations) were based on combining local and technical-scientific knowledge. Institutional development activities included organization of documents and participation in ABAT meetings. The active learning cycle (planning-monitoring-evaluating) and collective learning space promotion were also important components of the methodology adopted.

Cost-benefit analysis

The basic cost-benefit analysis was adapted to a community-based enterprise, and allowed the boatmen and fishermen to consider the real costs and revenues of the activity as well as to reflect upon possible

ways of reducing costs and fostering innovations and improvements in the service provided to tourists. The use of informative and simplified language in the workshops made it possible for all participants to understand the regulations related to visiting in protected areas, and traditional peoples' rights.

Relevant issues, such as proposals to improve the boat trips, and alternatives to stimulate tourism in the winter season, were also identified to balance the objectives of environmental conservation, local economic development and visitor experience. Thus, the representatives of ABAT were able to plan together how to present community demands at PNSB advisory council and thematic meetings, and improve ABAT participation and representation in the meetings.

Although many steps of the action plan developed by the working group have already been carried out in the last five years, the formalization of boat trips is still an ongoing process. The delay in effectively establishing the partnership between ABAT and the PNSB, including institutional and structural limitations from the environmental agency, was one of the greatest challenges of the negotiation process. The search for preventive (rather than responsive) alternatives to deal with uncertainties and difficulties is necessary, as is continuous advancement in empowering local representatives towards a balance in power relations between the government and the community.

The fragility of the authorization term to regulate boat trips in the PNSB causes insecurity and apprehension among the boatmen/fishermen. The National System of Conservation Units (SNUC), the National Strategic Plan for Protected Areas (PNAP), and the guidelines for visiting protected areas are regulations committed to social inclusion. However, no legal instrument is adapted to formalize community-based enterprises in protected areas. Furthermore, those instruments that provide greater

guarantee of permanence of the activity do not allow the participation of traditional communities on equal terms, when compared to large corporations.

The current environmental policy adopts the concession of tourism services in protected areas to large companies as a solution to manage and reduce the costs of conservation by the federal government. However, community-based tourism enterprises are clamouring to be included in these initiatives.

At a meeting of the PNSB advisory council in November 2016, the managers of the PNSB presented a project proposal to bid for services to support visits. The project included the construction of the PNSB headquarters in Trindade; it, however, did not include the boat trips. The representatives of ABAT sent an official letter to PNSB managers to ask for clarification about the proposal; there remains the possibility of participating in the bidding process, perhaps restricted to consultation with the affected communities. Thus, guaranteeing the autonomy of local initiatives in relation to public power and capital and market networks remains a challenge.

The combination of local and technical-scientific knowledge was essential to promote collective construction, social participation and positioning of the representatives of ABAT in different decision-making moments. Gradual changes and social transformation have been observed over time. Collective resistance actions, such as those designed by the project, must be strengthened to ensure the access to rights, human well-being and environmental conservation.

Improvements in public policies and legal instruments with respect to local communities and community-based enterprises are necessary to promote autonomy and security to them. Tourism-related activities should be considered, in addition to economic aspects, as opportunities to adopt co-management approaches that mediate social conflicts in traditional territories overlapping protected areas.

For more



<http://cercle.lu/download/partenariats/BarefootGuidetoOrganisationsWholeBook.pdf>

Barefoot guide to working with organisations and social change. Community Development Resource Association (CDRA)

<https://www.icsf.net/en/monographs/article/EN/36-social-security>

Social Security for Fishworkers in Brazil: A Case Study of Pará

Planning Blues

Tenure rights in Brazil's small-scale fisheries are fading in the shadows of irrational, poorly designed, and socially and environmentally unjust 'blue planning' processes

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In a recent exposition of challenges facing small-scale fisheries (SSF) in Brazil, Gerhardinger and others (*SAMUDRA Report* No. 76, May 2017) outlined the dramas faced by fisherfolk leadership, and SSF research and extension agents. Their actions are muddled by a policy arena dominated by corruption at several levels of government, lack of coherent, clearly defined focal points and lasting constructive engagement with government, making them feel like losing the sustainability transition battle to a never-ending agenda of backlashes in civil rights. Ever since, these and other dramas remain, and the

tones of *Our Ocean, Our Future: [United Nation's] Call for Action*" (a new soft governance mechanism for liaising multi-lateral voluntary commitments) and the proclaiming of the *UN's Decade of Ocean Science for Sustainable Development (2021-2030)*. Large polluter countries such as Brazil (with over 4 mn sq km of exclusive economic ocean zone) are buying in these calls for action, but the slow pace of sustainability-oriented transformations before us is really frightening.

Make no mistake—we cannot simply wait for 2021 new year's party to kick-off our samba beats around the defence of fishing tenure rights. Meanwhile, the grabbing of customary fishing territories rocks and rolls over fishers' livelihoods and will only lead to further dismay and even complete loss of artisanal fishing identities for several communities. On that cheerful musical metaphor, there is a saying in Brazil stressing that those playing the drums (in a given policy and advocacy arena) are leaders who put the players (for example, small-scale fisheries change agents) to dance, providing their lives with rhythm and, hopefully, some change for the good. We now briefly illustrate how shadows in blue planning can be formed at a wide territorial level, and how the lights of reason and social mobilization can be used to clear the house and silence these wicked enemies.

Fisher guilds

The Babitonga Bay shelters the southernmost large mangrove ecosystem in the subtropical Atlantic (Brazil) and is surrounded by six coastal municipalities (population: around 1 mn) in the northern coast

Fragmentation in environmental licensing creates a perfect atmosphere for political speculation and unethical bargaining...

expectations are for continued growth in complexity and political turmoil, as the country enters an electoral year that tends to mirror other highly polarized and tense elections being witnessed with other democracies worldwide. For instance, amongst the suite of scandals, the Brazilian president is being investigated over taking part in a corrupted port development scheme in Santos city (coast of São Paulo state).

There is the shaping of a new international scientific and policy discourse on blue growth, blue planning or any other big blue solution that may be associated with the healing of human-ocean interactions through reasonable combination of scientific methods and local ecological knowledge. Consider the frisson generated by the optimistic

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of Santa Catarina state. Despite its national-level status of ecological importance, it is also intensively used by over 1,700 fishers, has already two large active ports, another port already authorized, and four others currently pursuing environmental licensing either under Federal or State-level environmental authority. Such fragmented processes do not assess the cumulative impacts on the social and ecological systems. They foresee public consultations only at the given city where port facilities are intended, but not the fishing grounds of fishers coming from almost every city. Nor do they take into account all the ecological impacts to marine biodiversity caused by explosions of submerged rocky reefs and huge levels of dredging in existing and new navigation channels, which could create a plume of contaminated material and affect several fisheries and critically endangered porpoises.

Hidden in the shadows sleeps a whole suite of wicked social, ecological and political effects. Once every single port infrastructure creates its own additional fishing exclusion areas, redistribution—and hence concentration of fishing effort in alternative grounds—would progressively increase already-existing conflicts amongst fisher groups, and

augment pressure to marine life. Fragmentation in environmental licensing creates a perfect atmosphere for political speculation and unethical bargaining—for example, lobbyists distributing gifts to gain support (such as gillnets to fishers, painting the local public school and church, donating equipment to the local Navy office, etc.)—and proliferation of fallacious information to manipulate fisher's perceptions of the risks before them. The president of one of the main regional fisher guilds (in São Francisco do Sul), for instance, deeply believes there is no future for fishers, an understanding that justifies a strangely intimate alliance he maintains with some private port investors.

Fortunately, at least two intersecting initiatives have been launched to shed light on these shadows. Firstly, we refer to a recent fisher's movements in Babitonga Bay around small-scale fishing territories, "*1st Congress of Babitonga Bay Artisanal Fishers in Defence of Fishing Territories*", co-produced by the Sea Memories Collective (a marine conservation network), the National Artisanal Fishers Movement, fishers' leaders from other affected guilds and associations, and financially supported by Instituto Linha D'Água.

WWW.BABITONGAATIVA.COM



Participants of the first congress of Babitonga Bay artisanal fishers in defense of fishing territories, March, 2016. The event enabled exchange of experiences and planning to come up with a united voice on the protection of fishing tenure rights

The event enabled exchange of experiences and campaign planning, gathering over 200 fishers to come up with a united voice on the protection of fishing tenure rights, which was materialized in a public statement, namely the “Letter of Itapoá”.

Another initiative relates to the Babitonga Bay project, led by the University of the Region of Joinville with several partners, a process maintained by the Public Ministry with funds derived from judicially deposited environmental fines. Since 2015, the project has been delivering a suite of social mobilization and strategic planning activities, co-ordinating dozens of governmental and societal organizations to co-design new multi-stakeholder coastal and marine governance platforms, as part of an inclusive marine spatial planning process for Babitonga Bay. A core objective has been to spatially identify and value critical ecosystem services to guide future negotiation of trade-offs in collective planning and zoning.

We present herein some of the project’s results derived from collaborative seascape mapping workshops with five resource user groups (fishing, aquaculture, aquatic transport, tourism and leisure, and sand mining) and over 177 people engaged in these workshops. We used an Overlap Analysis Model (InVEST software) to identify what areas are more important to each user group (methodological details about the project presented here can be found at the project’s website and reports). For instance, the Figure below depicts fishing use (crustaceans, molluscs and fishes) intensity in four graduated levels: high, medium-high, medium and low, and also depicts the intended location of every port being licensed, as well as already operational infrastructures. The figure shows the inner areas of the bay where overlapping use can be noticed. Only 0.33 per cent of the total area has a high fishing activity (red), and this is precisely where three new ports are being licensed. Areas with medium-high fishing

intensity represents 17.5 per cent of the total inner bay area, and those with medium and low intensity represents 44.1 per cent and 38 per cent, respectively. The map helps an integrated assessment of impact, something that is not being done by both Federal and State environmental agencies in charge of licensing. For instance, if all ports are authorized, 2.66 per cent of the inner bay area (87.73 per cent overlapping high-medium intensity fisheries grounds) will be claimed for navigation channels, turning into non-fishing zones customarily critical areas that currently support small-scale fisheries livelihoods.

Fishers and local environmental organizations are outraged. They are now entering a judicial battle to confront this largely asymmetrical and unjust power arena that is currently dominated by politically aggressive private investors and their lobbyists, such as manipulated fisher leaders and opportunistic technicians working in unethical consultancy companies. While the more proactive and positive agenda led by the Babitonga Ativa project promises the delivery of integrated governance decision-making processes, their results are still not being considered by environmental licensing authorities who claim lack of appropriate legislation and mandate for integrated assessment. In fact, some even doubt that they would ever take a firm step toward opening the windows of reason to illuminate an integrated, socially and ecologically just strategic environmental assessment without a thunder strike of justice, independent science and social mobilization hitting the playing field.

While our dearest dreams might resonate with the refreshing music of Sustainable Development Goals’ agenda and the coming of the Ocean Decade, it should not be a distraction to face head-on—and now—the shadows of poorly designed, socially and environmentally unjust blue-planning processes. In this brief article, we have provided an illustration of the solution-scape—small windows of opportunity—

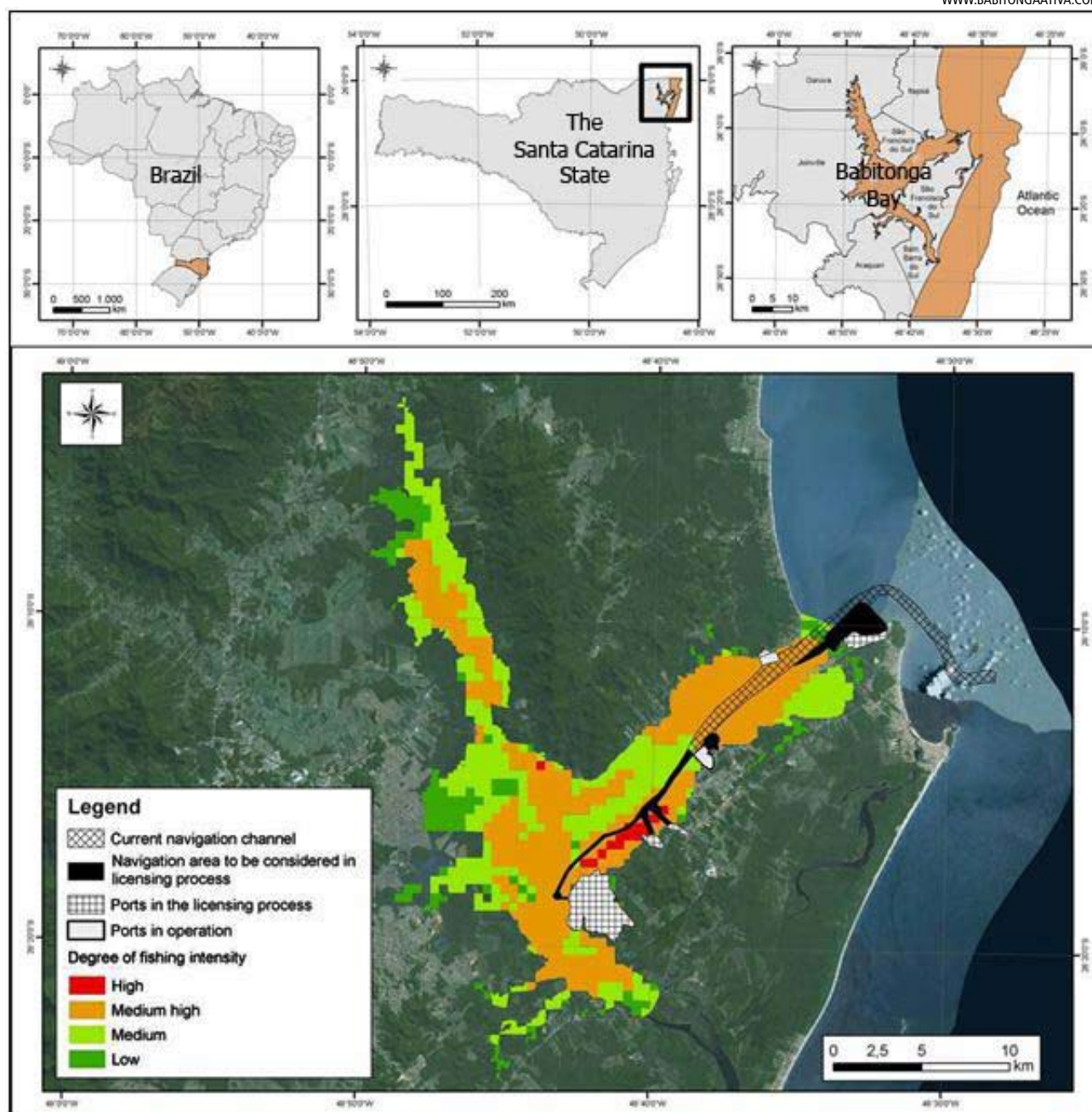


Figure: Spatial distribution of ports in operation, licenced or facing licensing process depicted against the level of fishing at Babitonga bay, Santa Catarina, Brazil

depicting how we ought to play the drums in science-policy arenas, to combat the viruses that thrive in the shadows of fragmented licensing processes.

Brazil and many other countries are already engaging in multi-year, national-level marine spatial planning processes. Social movements should seriously engage with concerned researchers and lawyers, as well as with conservation organizations. The pathological causations of such dreadful coastal planning, too often recorded at subnational levels, offer

us worrying hints of how national or transnational-level marine spatial planning ought to evolve. This year, several opportunities exist to strengthen the fight against ocean grabbing and empower fisherfolk leaders in national, regional and global debates. These include the World Social Forum (March, Brazil), the 3rd World Small Scale Fisheries Congress (October, Thailand), and upcoming developments in the structuring of a Knowledge-Action Network on Oceans by the Future Earth project, amongst others.

For more

<https://www.youtube.com/watch?v=3xKqFCE7FPo>

Babitonga Urgente!

<https://www.babitongaativa.com/>

Babitonga Ativa

Endless Conflicts

The access of Brazil's fishers to coastal land and sea resources has, in recent years, been hampered by increased urbanization, tourism and construction of harbours

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Q : In Brazil, do small-scale fishing communities have secure tenure rights—for their habitation, for shore-based activities, and for their fishing? Is there any conflict between different departments that regulate tenure arrangements?

A: In Brazil, all coastal land extends from the high-tide line up to 30 m, and it belongs to the Union. When fishers' land is situated in this area, fishers do not have any legal property right to the land, but usually they are not financially charged for the use of this land, particularly when such land is located outside urban areas.

In recent years, the Federal Government (through the Union Patrimony Service) has started a programme of officially granting this area for the use of artisanal fishers (for housing, as places to store fishing gear, etc.) for a longer period (20-30 years), which is renewable, as they belong to the social category of 'traditional communities'. As this programme was started by the previous (more socially oriented) government, we have no guarantee that it will be continued by the present government.

In recent years, due to the increase in urbanization, tourism and construction of harbours, some artisanal fisher communities have been (and are being) displaced; only some of them are receiving any kind of compensation, but frequently they lose access to traditional fishing grounds. In case they sell their land to outsiders, they also lose access to the beach and to places where their fishing gears are stored. Coastal waters within 12 nautical miles belong to the Union. In principle, no industrial boats or large trawlers are allowed to operate within 1.5 nautical miles from the shoreline, but the law is broken frequently, and there is no surveillance.

Access to fishing in coastal areas is entitled to those fishers (and vessels)

that are properly registered in fishing guilds (*colônias*) or associations. There is no area restriction along the entire coast for fishers (men and women) if they are regularly registered, except for marine protected areas. There is a special regime for the fishers' communities that belong to an officially recognized 'marine extractive reserve'. Only fishers residing inside this type of reserve can use the natural resources of the reserve that are administered both by a director belonging to the Chico Mendes Environmental Institute (IcmBio) and the fishers' association(s).

There are frequent conflicts between the Department of Fisheries under the Ministry of Agriculture, responsible for the fishing as an economic activity, and IcmBio responsible for the protection of fish species. An example of this conflict is the list of endangered fish species prepared by IcmBio, often without consulting the Ministry of Agriculture (Fisheries), resulting in endless conflict.

Q: Are there indigenous/tribal communities in Brazil that utilize the aquatic resources? Are their rights safeguarded? Have they suffered marginalization of any kind?

A: In Brazil, there are two kinds of what we call 'traditional communities': Indigenous (Indian) peoples and non-Indian traditional communities as *quilombolas* (ex-slaves) communities of artisanal fishers. Officially-recognized Indigenous peoples or coastal fishers have their rights over land and way of life safeguarded by the nation's Constitution. There are a few Indigenous fishers along the coast, as the majority of them live along the rivers and lakes in continental regions.

There is an increasing number of conflicts due to the construction of large dams, and expansion of agribusiness, particularly in the Amazonian rivers. There are also conflicts between the

This interview with **Antonio Carlos Diegues** (antoniodiegues69@gmail.com), Anthropologist, University of São Paulo, Brazil, was conducted by the ICSF Team (icsf@icsf.net)

establishment of non-use protected areas (National Parks) and Indigenous land. There is a tendency for government environmental institutions to take for granted that overall environmental restrictions in land use are applied also for Indigenous peoples, although Indigenous peoples' rights are guaranteed by the Constitution, which is the greatest source of rights, ranking above Government laws and decrees.

Quilombolas (descendants of African slaves) fishers also have their territorial rights guaranteed by the Constitution. There are already a number of *quilombola* communities that live along the coast and have got their rights over their territory. Again, there is a great pressure over these territories from harbour expansion, growth of tourism facilities, and coastal monoculture like sugarcane plantations; usually, these conflicts end up in court and take years to be resolved. There are many traditional non-Indigenous communities in Brazil; some of them are artisanal fisher communities that were recognized by the previous governments through decrees. However, territorial rights are only recognized to those living within some 30 Marine/Coastal Extractive Reserves.

Q: Are there instances when the government has granted fishing access to the disadvantage of the SSF? Are there fishing communities in your area displaced by development activities? Are they consulted before implementation of large projects?

A: The present Federal Government is openly favouring only private interests, privatizing important public firms (like ex-State-owned electricity firms), harbours, and so on. The fisheries sector, which earlier had a Ministry to oversee its development, is now in a downgraded status, with merely a Department in charge, first within the Ministry of Industry and now in the Ministry of Agriculture, totally controlled by agribusiness for export and commercial aquaculture.

Fishers' organizations, such as the Movement of Fishers and Fisherwomen (Movimento de Pescadores e Pescadoras), linked to the Catholic Pastoral for Fisheries (CPP) that was more active during the previous government's regime,

appear to be losing ground now. The Movimento is, however, the most active movement that has appeared in the last few years. The reaction to fishers' displacement by harbours and other tourism activities depends mainly on local movements/organizations, and do not have enough political support in a Congress dominated now by strong financial groups.

Local communities are rarely consulted about the implementation of large projects in coastal areas. They are displaced to places far from their fishing grounds, receiving only a plot to build their houses (mere shacks), as has occurred in the northern state of Maranhão, Espírito Santo, etc. Sometimes there is a project to 'recycle' communities into other non-fishing activities (usually construction work). Only few of those displaced return to their previous fishing activities. Fishing rights are being reduced drastically, particularly those related to social services (mainly, health and education).

Q: What is the role of women in Brazilian small-scale fisheries?

A: There is an increase in the participation of women in artisanal fisher associations/movements, particularly in some Northeastern States, such as Bahia, Pernambuco, etc. This increased participation has led to greater recognition of their rights until 2012. These rights, however, have been reduced since then. One example is a recent legislation in regard to women working in fish processing and marketing, who have lost their rights as 'fishers' and are now included under the head, 'fishing auxiliary activities'. As a result, they have lost access to the closed-season allowance (under the Seguro defeso pesca scheme, for example). There are also examples of processing projects where women are the majority participants (for example, in Rio Grande do Norte). In some Provinces (like Bahia), women are a majority in the shell harvesting subsector. In recent years, due to a dramatic increase in unemployment—Brazil has still around 12.5 mn unemployed people, mainly youngsters—fishing has become an important subsistence activity also for unemployed women, particularly in the Northeast of the country. 3

For more



<https://www.icsf.net/en/monographs/article/EN/99-Marine-Protecte.html>

Marine Protected Areas and Artisanal Fisheries in Brazil

<https://www.icsf.net/en/monographs/article/EN/40-artisanal-fishe.html>

Artisanal Fisheries in Brazil

Banding Together

By uniting to fight land grab by business interests, members of the Preynub II Community Fishery in Cambodia have set an example for other communities

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It's early Tuesday morning, and along a dike that separates the mangrove forest from the fish nursery habitat, Ream Mosavy is collecting blue shell mussels. For generations, his community has harvested mussels here, a means to their very survival. But in 2016, a powerful business person grabbed 45 ha of the community's land, threatening the community's food supply. Approximately 45 ha of the mangrove forest were encroached upon by the entrepreneur who wanted to convert the land into a coconut plantation. "Our community depends largely on natural resources—fishing

and internal rules and regulations to manage resources on its common property. This status put Preynub in a relatively stronger position to exercise its community's rights in excluding outsiders. To counter the powerful vested interests that were responsible for the encroachment, Preynub used the mass media to focus on the issue. They reached out to television channels and provided information on the encroachment. Their story received widespread news coverage, and attracted the attention of provincial and national authorities.

The Provincial Governor quickly called for an investigation that led to the community being granted back its land, with a commitment of no further attempts at encroachment. "It's because of this dependence (for food) that our community makes special efforts to take care of our resources," Mosavy says. "We are able to not only manage our resources, but, if required, we can also mobilize collective efforts to stop encroachment of our forest land from external commercial interests." The Preynub II Community Fishery is responsible for managing an area of 4,500 ha, which comprise 650 ha of mangrove forest. Its prized location, close to rich resources and along the national highway, provides it with easy access to natural resources, local markets and public services.

There are signs too that within the government there is recognition that strong communities bring both better protection of the environment and stronger economic growth.

and forests—for our daily needs, and we don't have to spend a lot of money on purchasing food items. If the forest is no more, we would find it extremely difficult to survive," says Mosavy, Chief of the Preynub II Community Fishery.

Mosavy knew if the community did not act soon, they would lose their land. So they organized a campaign to regain control of it. First, a formal complaint was filed with support from the Fisheries Administration. In a sign of internal solidarity, all community members stood up against the entrepreneur and either signed or put their thumbprint on the complaint.

Preynub, as a registered Community Fishery, has legal documents endorsed by the Ministry of Agriculture, Forestry and Fisheries that include a clear defined boundary,

Alternative livelihood

The Cambodia REDD+ Programme, supported by the United Nations Development Programme (UNDP) (REDD = United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries) and the Forest Carbon Partnership

*This article is by **Nick Beresford** (communications.kh@undp.org), Country Director, United Nations Development Programme, Cambodia*

UNDP / CAMBODIA



Villagers with blood cockles collected from the sea. Preynub's success shows that empowered local communities can protect their resources and property

Facilities, in collaboration with the Fisheries Administration, supports Preynub's efforts to reduce deforestation and forest degradation. The programme enhances the capacity of local communities and authorities to address forest encroachment through awareness raising, patrolling activities, reporting and documentation. In addition, new and alternative livelihood opportunities such as ecotourism provide an incentive for communities to protect resources.

There are signs too that within the government there is recognition that strong communities bring both better protection of the environment and

stronger economic growth. The draft Environmental Codes, championed by the Minister of Environment, Say Samal, give wide-ranging powers to the local government and local communities. The codes also provide a new direction in sustainable development, and a radical transfer of powers to local councils and communities. Preynub's success in regaining its land proves that empowered local communities that band together and work with the local authorities can protect their resources and property. It can serve as an important lesson for other communities facing similar situations. 3

For more



<http://www.fao.org/3/a-i7206e.pdf>

**Community Fisheries
Organizations of Cambodia:
Sharing processes, results and
lessons learned in the context of
the implementation of the SSF
Guidelines by John Kurien**

<http://www.kh.undp.org/>
UNDP in Cambodia

Clear and Present Danger

Despite good policies and programmes, the Philippines struggles with illegal, destructive and unsustainable practices and use of coastal resources and fisheries

Coastal resources in the Philippines are severely depleted. Over the past century, mangrove forests have lost three-fourths of their cover and are currently facing a deforestation rate of 2,000 to 3,000 ha per year. In a study in 1996 by White and De Leon (see the For more box below), it was revealed that only 140,000 ha of mangrove forests remain out of 450,000 ha. Based on a report by the Philippines' Bureau of Fisheries and Aquatic Resources (BFAR), only four per cent of coral reefs remain in excellent condition (more than 75 per cent coral cover), 28 per cent in good

illegal, destructive and unsustainable practices and use of coastal resources and fisheries abound.

Marine capture fisheries in the Philippines is mainly categorized into two types: commercial and municipal fishing. Municipal fisherfolk are those who use boats measuring under 3 gross tonnage (GT) and include those in shell gleaning, fry gathering, fish vending and fish processing. Municipal fishing is for subsistence or local small markets and generally employ traditional fishing techniques. It is stipulated in the fisheries and local government codes that the municipal fisherfolk have preferential use rights over municipal waters which cover the fishing grounds 15 km seaward from the shoreline, including freshwater lakes and rivers within the territorial boundaries of a municipality. Commercial fishers are defined as those who use fishing vessels of 3 GT and above, which are further categorized into small, medium and large commercial fishing vessels. Commercial fishers are generally allowed to fish anywhere in the country's territorial waters, except inside the municipal waters. Despite the clear policy of the preferential use of municipal waters by municipal fishers, commercial fishing vessels frequently encroach inside municipal waters, which is practically the rule than the exception, largely because of corruption, low enforcement capacity and low political will of the authorities concerned.

Open access

As a result of the lack of implementation of the rules in the use of coastal resources, the situation can be characterized as largely 'de facto open-access'—a state

...gender issues and gender-based discriminations hamper the attainment of inclusive and sustainable development and poverty reduction.

condition (50-75 per cent cover), and the remaining range from poor to fair conditions, due mainly to sedimentation and blast fishing in nearshore areas. According to a study conducted by Forbes and Santos in 2004, only 978 sq km of seagrass beds remain out of the more than 10,000 sq km in 98 surveyed sites.

In an earlier study, it was revealed that all major fishing bays in the Philippines are heavily exploited. The National Stock Assessment Program of BFAR indicates that two-thirds of the 12 major fishing grounds in the Philippines are overfished. Worse, 75 per cent of the total of fishing grounds in the Philippines show indications of overfishing. Despite good policies and programmes to curb the degradation of resources,

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where access to coastal resources is unrestricted or free-for-all, and those who have the capital, political influence and technology are the ones to mainly rake in the benefits streaming from fisheries, without accountability for whatever happens to the resource base. Institutions mandated to enforce fisheries laws and implement management programmes are weak. Fishing communities are also weak and largely unorganized to claim and assert their preferential rights over municipal waters.

In 2016, the Philippine Fisheries Code was amended. The Philippine government instituted policies to control illegal, unreported and unregulated (IUU) fishing. In 2014, the European Union (EU), in its fight against IUU fishing, warned the Philippines with a 'yellow card' about the risk of being identified as a non-co-operating country. Countries in the list are banned from trading in fisheries products with the EU. Countries can be removed from the list once they have proven that concrete measures have been taken to improve the situation. The yellow card is a threat to the market access of Philippines' fisheries products to European markets, which currently absorb 40 per cent of the exports of the country's tuna products.

The EU yellow card prompted the Philippines government to amend its Fisheries Code in 2015, which was finally approved in 2016. The amendments are more focused on commercial fishing and impose stricter rules and higher penalties for commercial fishing that violates the laws of the Philippines, including the rules of Regional Fisheries Management Organizations to which the Philippines is a signatory, like the Western Central Pacific Fisheries Commission (WCPFC). A satellite-based vessel monitoring system (VMS) is also required for medium- and large-scale commercial fishing vessels.

The amendment requires municipal fisherfolk to regularly report their fish catches. Failure to do so will lead to penalties and fines and/or community service. The

government seems to have realized the importance of data collection on the catch and effort of municipal fisheries. Nation-wide campaign programmes on municipal fisherfolk and boat registration have been implemented since 2013. The amendment is expected to bring about major changes in fisheries law enforcement in the country, but to what depth and breadth remains to be seen.

Based on recent statistics, an estimated 1.8 mn fisherfolk in the country are engaged in municipal fishing. The average incidence of poverty reported in the fisherfolk sector was 39.2 per cent in 2012. This means that four out of 10 Filipino households of small-scale fisherfolk—or over 700,000 fisherfolk households (with an average of five members per household)—are below the poverty threshold.

Municipal fisherfolk are generally characterized by low-income households. Many of them have only high-school education. Many lack land-based assets and do not have security of tenure of their settlement areas, situated mostly within the nearshore areas. Most fishing households have poor access to water, health, education, housing, credit, and other welfare services. Given this situation, many fishing households are dependent on loan



Fishers in Sarangani Province in Mindanao, Philippines. The municipal fisheries production system can be described as highly fragmented, with average catches of 5 kg per fishing trip

sharks and fish traders for financing of their everyday subsistence from fishing ventures, for basic food consumption, for the school needs of children, and for emergency needs during the lean seasons. In return, fishers are obligated to sell their catches for much lower value to trader-financers, who also impose high interest rates on debts.

The municipal fisheries production system can be described as highly fragmented, with individualized fish-harvesting methods, usually operated by one to three personnel, with average catches of 5 kg per fishing trip. This is true as well for processing and marketing fish-based products. Municipal fishers are vulnerable to settle for the fast buck, a situation that is being exploited by the more enterprising traders who consolidate the catches into volumes required to cover the logistics for the nearest market centres. This fragmentation makes it difficult to organize the fisherfolk—not only for enforcement against illegal fishing or claims for areas, but even for collective economic activities.

The marginalization of women in the fisheries sector may be attributed to the cultural notion of fishing as being a 'man's work'; women are not considered as 'fishers'. Even as the pre- and post-harvest activities are the domains of women, their participation has been considered as merely supplementary to that of men and an extension of their reproductive roles in ensuring the survival of their fishing households. In the frame of market-oriented fisheries development, women's involvement is almost always not considered in the estimate of gross domestic product (GDP) and do not figure in the calculations of market valuation, which, in effect, undervalues women's labour and socioeconomic contribution.

The non-recognition of women as equally important stakeholders and the lack of valuation of their contribution to the fishing industry throw up various gender issues, particularly in unequal access of women to control over, participate

in, and benefit from, resource management and development. The following issues must be addressed to accelerate gender equality: lack of sex-disaggregated statistical information and gender analysis useful for policy and programme development; discriminatory fisheries registration and licensing system; lack of comprehensive and integrative programme and budget allocation for women fishers; and limited involvement of women in the formulation/planning and implementation of fisheries policies and programmes at all levels.

These issues are closely linked to other issues faced by women that hinder the realization of their equal rights to development, such as resource depletion, coastal habitat degradation, weak fishery law enforcement, lack of access to basic social services, non-utilization of the gender and development (GAD) budget for improving women fishers' welfare, and the prevalence of violence against women and children in coastal areas.

It should be noted that gender issues and gender-based discriminations hamper the attainment of inclusive and sustainable development and poverty reduction. It is, therefore, imperative to take into consideration the gender dimension of vulnerability to impacts of climate change, poverty and underdevelopment in the fisheries sector to realize inclusive and sustainable growth, poverty alleviation and resilience. Identifying the gender issues and concerns embedded in the complex problems of the fisheries sector through an in-depth analysis will lead to the development of more gender-responsive programmes and policies that will help facilitate and accelerate the attainment of a more inclusive and sustainable development in the sector. Women's equal rights to development should be recognized and promoted in order to reduce, and eventually close, the existing gender gap between men and women.

The Philippines government, being the primary duty-bearer, is committed

to promoting and protecting women's human rights towards the achievement of substantive gender equality through the eradication of gender-based discrimination, as stated in the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW).

This commitment is translated in the enactment, in 2008, of the Republic Act (RA) 9710, otherwise known as the Magna Carta of Women, which paved the way for the stronger legal foundations of women's claims over their rights. The passage of the Magna Carta was a result of persistent lobbying and advocacy of civil society groups and women's rights advocacy groups, including Tambuyog. It is an important legislative milestone that clearly defines women in the marginalized sector and provides for a comprehensive legal framework for human rights in these sectors. The Magna Carta of Women likewise promotes GAD and gender mainstreaming as a development framework and strategy. It also guarantees specific sectoral provisions for the rights and empowerment of marginalized women. In addition, the law provides for the implementation of Temporary Special Measures (TSMs) in order to accelerate women's empowerment and gender equality.

Specifically, women in the fisheries sector have finally been distinguished by the law as it recognizes the existing marginalization that they have been experiencing, particularly in resource management and governance as a result of some form of gender-based discrimination.

With these policies, women fishers are guaranteed specific rights and entitlements, such as equal rights to utilize, manage, develop and benefit from fisheries and aquatic resources, and equal opportunities for empowerment and participation in resource management, governance and other relevant economic activities.

While there may have been developments on the recognition of women, much still remains to be done in terms of translating progressive policies to actual practice and implementation. In general, especially at the grassroots level, conscientisation

on the valuable roles, contributions and rights of women fishers is necessary. The level of awareness on the importance and rights of women fishers themselves needs to be increased.

Apart from being poor, municipal fisherfolk have now to contend with increased vulnerability to the impacts of climate change. The Philippines is one of the countries most susceptible to increased vulnerability to climate-change impacts, which have already been evident with typhoons Pablo and Sendong claiming high numbers of lives and properties in areas not usually visited by such extreme weather events. Experts have said that

TAMBUYOG DEVELOPMENT CENTER



Women workers in a Blue swimming crab meat processing station in Bantayan, Cebu, Philippines. Women's equal rights to development should be recognized and promoted

had there not been massive loss of mangrove forests in the Philippines—which serve as a buffer against strong winds and waves—the devastation that these typhoons wrought would have been less severe.

The clear and present danger to small fishers and their resources are the human-induced activities that degrade coastal resources and endanger food security, human

The Fisheries Code provides for the participation of small-scale fishers both in national and local fisheries governance through FARMCs.

security and the livelihoods of millions of people in coastal communities. The already vulnerable small-scale fishers, especially women and children, who are struggling for their survival, face more risks and dangers from natural and human-induced hazards.

Impacts of climate change on the fisheries sector could further exacerbate the existing dire condition of the fisheries resources and poor coastal communities. At the same time, the impacts of climate change are often worsened by the social and environmental costs of human activities. In the case of the small-scale fishers, these are the very old, yet present, issues of unsustainable fishing practices, overfishing and habitat degradation, inequitable access to, and control over, resources, resource use and users' conflicts, neoliberal fisheries trade policies, inadequate and ineffective resource-management regimes, and the gender gap in fisheries, among many other issues.

With the impacts of climate change, the already poor become poorer and the already vulnerable become more vulnerable, thereby exacerbating the development gap and perpetrating social injustice. This, on the other hand, provides the imperative to fight even harder for justice, equity, equality and sustainable development.

Tambuyog and its network of non-governmental organization (NGO) fisheries-management practitioners advocate for coastal adaptation, which is tantamount to addressing the long-standing plight of the small-scale fisherfolk and the fisheries industry in general, which have witnessed increased vulnerabilities. Tambuyog believes that addressing these concerns will contribute to reducing vulnerabilities and in building resilience of coastal communities from climate-change impacts.

Anchored in a rights-based framework, coastal adaptation is an obligation of the state, while it is a right of the small-scale fishers and coastal communities. Just like any other basic right, it is not optional but must be guaranteed to the people and is interrelated to the other human rights of small-scale fishers. Responding to climate-change adaptation means responding to other socioeconomic, political and developmental issues of the fisheries sector and vice versa.

The fishing-ground-based management is within the Ecosystem-based Fisheries Management Approach or framework, which focuses on the sustainable management of fisheries and critical habitats (namely, mangroves, seagrass beds and coral reefs).

On more concrete terms, practitioners of sustainable fisheries management among NGOs work towards the sustainability of a more healthy mangrove system by facilitating the establishment of a community-managed mangrove nursery, where appropriate, both as a management intervention and as a livelihood enterprise. In other areas—if and whenever feasible—these groups also facilitate the establishment of marine protected areas (MPAs). To ensure their sustainability and tenure, the interventions include lobbying for the issuance of a community-based management policy instrument for the management of critical habitats and fisheries resources in the overall fisheries ordinances of partner local government units (LGUs), with

preference to organized fishers in the localities as 'resources managers' or development partners.

Under the existing Philippines Fisheries Code as amended, fisheries management has been decentralized from the central government to the LGUs, which are now empowered to manage both their coastal and fisheries resources within the municipal waters, including the regulation of commercial fishing within the said areas. BFAR, at the national level, is in charge of the overall sustainable development of the fisheries industry to include all the subsectors, such as the municipal fisheries, commercial fisheries, aquaculture and post-harvest sectors. BFAR provides extension service in terms of technology and capacity-building support to the LGUs and small-scale fishers in the management of municipal waters. It also plays a big role in providing law-enforcement assistance, especially on issues of commercial fishers' intrusion, since it has the expertise and resources.

While the LGUs are mandated to implement fisheries policies at the local level through the enactment of local fisheries ordinances, many of the coastal LGUs, it should be noted, do not have the technical and financial capacities to do so. In most cases, they seek assistance from BFAR in the implementation of key fisheries programmes and projects such as the establishment of fish-landing centres and post-harvest facilities and equipment, and even for provision of fishing paraphernalia to small-scale fishers. With technical support from BFAR, LGUs also initiate inter-LGU collaborations in promoting issues such as the sustainable management and development of common fishing grounds, through establishment of closed seasons, unified patrolling system, and so on.

The Fisheries Code also provides for the participation of small-scale fishers both in national and local fisheries governance through the Fisheries and Aquatic Resource Management Councils (FARMCs). There are also other participatory

bodies like the Artisanal Fisherfolk Sectoral Council at the National Anti-Poverty Commission and the Philippines Council for Agriculture and Fisheries at the Department of Agriculture. These platforms are already institutionalized and can be maximized by organized fisherfolk groups in advancing their rights and development agenda and in influencing the government to cater to their needs and concerns.

Access to programmes and projects of national and local governments can also be secured by ensuring inclusive fisheries registration. However, the main issue, most of the time, is patronage politics, which is where the need is felt for strong and collective action by organized fisherfolk groups.

The Co-operative Development Authority plays a big role in the registration and accreditation of fisherfolk co-operatives. It can provide technical and capacity-building support to newly organized fisherfolk co-operatives. The Department of Environment and Natural Resources focuses on the implementation of policies and regulations, and issuance of permits pertaining to utilization and management of coastal resources such as mangroves, foreshore areas and water resources, among others. The Department of Trade and Industry can provide technical and capacity-building assistance on prospective enterprise development of organized fisherfolk in terms of product development, packaging and marketing. The Department of Labour and Employment registers and accredits organized groups of fishers as informal workers.

Besides directly increasing the level of awareness and capacities of partner fishers in claiming their rights through development interventions, sustainable fisheries management practitioners among NGOs in the Philippines employ the basic principles of the rights-based approach. They ensure that the fisherfolk and coastal communities are partners in decisionmaking in every step of the development process. 3

For more



<http://www.tambuyog.org/about-us/>
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[http://www.europarl.europa.eu/RegData/etudes/STUD/2014/529069/IPOL_STU\(2014\)529069_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2014/529069/IPOL_STU(2014)529069_EN.pdf)

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Philippine small pelagic fisheries and their management

Strong Pillars

The fisheries and coastal resources policy of Indonesia requires a specific operational and regulatory framework to ensure the the protection of traditional small-scale fishers

Joko 'Jokowi' Widodo, the President of Indonesia, mentioned in a speech on 13 November 2014 that "the second pillar (of the Global Maritime Axis) is a commitment to maintain and manage marine resources with a focus on building marine food sovereignty through the development of the fishing industry by positioning fisherfolk as the main pillar".

The emphasis on fisherfolk as the main pillar of food sovereignty cannot be separated from the strategic role played by small-scale traditional fishers, for several reasons. First, around 86 per cent of domestic

Small-scale fishers are defined as people who earn their livelihood in fishing, without using fishing vessels or using only those vessels under 10 gross tonnes (GT). Fish farmers have been divided into three categories: freshwater fish farmers, brackish water fish farmers and marine fish farmers.

Although women have an important role in the fishery sector, they are not acknowledged as fishers, fish farmers or as post-harvest fishery actors. Women are placed as part of the households of the fishers' family, as described in Law No. 7 of 2016. The lack of recognition of women manifests as an absence of political recognition and an absence of protection of women's special rights, such as those related to sanitation and the right to participate in fisheries management.

The freedoms granted to small-scale fishers under the Fisheries Law range from: freedom to fish in all areas of fisheries management in the Republic of Indonesia; exemption from complying with the provisions of the fishing vessel monitoring system; exemption from licensing obligations including SIUP (licence for doing business in fisheries), SIPI (licence to capture fish) and SIKPI (licence to transport fish); and (c) exemption from fishery charges. But these freedoms do not ensure secure access to, and control over, fishery resources, nor do they prevent parties from outside the small-scale fisheries subsector gaining access to the resources.

Fisheries legislation

The Government of Indonesia has specified 11 fisheries management areas, which determine utilization

Small-scale fisherfolk have to compete for resources with fishing vessels above 10 GT.

fish supply comes from small-scale fisherfolk. Second, their local wisdom shapes a conservation ethos which values wise, fair and sustainable exploitation of coastal and marine resources. Third, most Indonesian fishers—up to 90 per cent of the total fisher population—are from the small-scale traditional sector.

This article attempts to assess the fisheries and coastal resources policy, which is regulated by three principal legal regimes, namely, (i) the Fisheries Law, (ii) the Coastal and Small Island Management Law, and (iii) the Ocean Law. Later, in 2016, the Government of Indonesia published the Law on Protection and Empowerment of Fishers, Fish Farmers and Salt Farmers.

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arrangements under fisheries management plans. However, the process of formulating the fisheries management plans does not involve small-scale traditional fishers and fisheries management institutions or their representatives.

Utilization of coastal resources and small islands within 12 nautical miles from the shore is permitted under the Law on the Management of Coastal Zone and Small Islands. Coastal utilization is regulated under four coastal and small island management plans, namely, (a) RSWP-3-K / Strategic Plan for Coastal Zone and Small Islands; (b) RZWP-3-K / Zoning Plan for Coastal Areas and Small Islands; (c) RPWP-3-K / Coastal Area Management Plan and Small Islands; and (d) RAPWP-3-K / Action Plan for the Management of Coastal Areas and Small Islands. The latter Action Plan establishes spatial structures and patterns in area planning, and delineates activities that may be allowed or prohibited, including those that may be undertaken only after obtaining a licence.

Law No. 7 of 2016 provides Business Assurance Guarantees towards the livelihood spaces and

access rights of small-scale traditional fisherfolk, small-scale fish farmers, and small-scale salt farmers. The 'livelihood spaces' are defined to include fishing zones, or capture fishery zones, fishing harbours, and the habitations of small-scale fisherfolk, traditional fisherfolk, small-scale fish farmers and small-scale salt farmers. Article 25 paragraph (5) of Law No. 7 mandates the provision of livelihood spaces and access to small-scale fisherfolk, traditional fisherfolk, small-scale fish farmers and small-scale salt farmers in every spatial plan, both in relation to the land spatial planning (RTRW) and in relation to the coastal and small islands' zonation plans (RZWP3K).

The RZWP3K regulates the allocation of space within the coastal and small island zones below 12 nautical miles from shore as: (i) the general utilization area, (ii) the conservation area, (iii) certain national strategic areas, and (iv) sea lanes. The utilization of marine space within two nautical miles is prioritized for the livelihood of small-scale fisherfolk, traditional fisherfolk, small-scale fish farmers and small-scale salt farmers. However, in the general utilization area, there

EMIL MISBACH



Father and son is placing traditional static fishing gear (locally called as *pasang*, *tadah arus* and *pertorosan* smiliar to stow nets) at Surabaya, East Java Province, Indonesia

EMIL MISBACH



Small-scale fishers are defined as people who earn their livelihood in fishing, without using fishing vessels or using only those vessels under 10 gross tonnes (GT)

Small-scale fisherfolk have to compete for resources with fishing vessels above 10 GT. Slack monitoring, control and surveillance throws open to other parties access to resources. Small-scale fishers have no exclusive rights and their strategic role has not been recognized in terms of sufficient protection of their tenure rights to fishery and land resources.

Although the Law No. 7 of 2016 is basically a good legal instrument, it requires a more specific operational and regulatory framework to be truly effective. What has been stipulated in Article 25, paragraph (5) of the Law can be the foundation to ensure the protection of tenure for small-scale fisherfolk. The protection of fisherwomen warrants a specific action plan, especially since there is no comprehensive national gender-disaggregated data in fisheries. A comprehensive gender analysis of women working in the fisheries sector as fishers, fish farmers, fish processors and fish marketers is urgently required.

Alternative measures for the protection of fishing community tenure can be done by integrating the FAO Tenure Guidelines and the FAO Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines) as the guidance framework for the implementation of the 2016 Law. At the level of the Association of Southeast Asian Nations (ASEAN), a regional action plan to secure small-scale fisheries needs to be developed by the Southeast Asian Fisheries Development Center (SEAFDEC).

is no exclusive fishing zone for small-scale fishers. In this area, small-scale fishers face competition from other sectors like conservation, marine protected areas, tourism and even from public infrastructure.

With respect to land use for housing, any person who has occupied a piece of land in good faith (for example, after paying relevant taxes) for at least 20 years is protected by the provisions of Article 1963 and Article 1967 of the Civil Code and Article 24 paragraph (1) and paragraph (2) of Government Regulation No. 24/1997 on Land Registration. This provision recognizes the right of occupants who have occupied the land to register their land; if the occupation period has exceeded 30 years, the right to the land shall not be granted to a third party. However, there are obstacles to the registration and certification of land due to rampant corruption and the absence of provisions for the government to actively register land for fishing communities in coastal areas and small islands. The responsibility of providing land in coastal areas and small islands for habitations lies with the Ministry of Agrarian and Spatial/National Land Agency. However, the responsibility of registering fishers lies with the Ministry of Marine Affairs and Fisheries.

For more

<http://knti.or.id/>

Traditional Fisherfolk Union of Indonesia (KNTI)

<http://extwprlegs1.fao.org/docs/pdf/ins97600.pdf>

Amendment To Law No. 31 Year 2004 Concerning Fishery

Re-visiting the Law

The government of Vietnam seeks to empower the country's fishermen through the landmark passage of an amended fisheries law

Vietnam is home to one of the most diverse marine ecosystems in the world, providing habitats that include mangroves, coral reefs, seagrass beds and coastal lagoons for a wide variety of species. Because of this diversity (particularly in commercially valuable species) and its extensive coastline (over 3,000 km), an important sector of Vietnam's economy is fishing. However, its coastal fisheries are suffering under intense overexploitation. It is reported that the catch in areas of 50 m depth or less is two to three times higher than the maximum sustainable yield (MSY). This simply cannot be sustained. The country's fisheries sector is governed by a suite of legislation at both State and provincial levels. The strategic fisheries master plan, revised and adopted in 2013, has the overall aim to focus on value-added growth and sustainable development of the fisheries sector. As part of the re-structuring and reform strategies, the government also adopted the National Plan of Action (NPOA) in 2014 to reduce the fishing efforts as well as protect the fisheries resources. Part of that exercise involved revising the existing national policies and legal frameworks to ensure that sustainability played a more significant role.

The Centre for Marinelife Conservation and Community Development (MCD) is a local NGO working to address challenges facing Vietnam's fisheries sector. MCD is supporting a pilot programme of Ecosystem Approach to Fisheries Management (EAFM) in Binh Dinh Province in Central Vietnam, which advocated this approach to the government and has worked with the

Directorate of Fisheries to incorporate the appropriate components into the revision of Fisheries Law 2003. Integral to this approach is co-management, whereby the local fisher communities that rely on the fisheries for their livelihoods, work collaboratively with the government to manage the resource. Empowering these communities has proven to be successful in fisheries management in other jurisdictions in other countries, such as in parts of the Philippines.

On 21 November 2017, the National Assembly adopted the long-awaited amendment to the Fisheries Law, and the concept of co-management was

The co-management decree is being drafted to cover the most significant issues of recognized community groups and fishing rights...

sanctified as a legal document for the first time. Local community groups now have the legal recognition needed to effectively carry out marine resources protection at a local level, including the delegation of fishing rights. The law also integrates climate change, and the fight against illegal, unreported and unregulated (IUU) fishing, apart from strengthening management of marine protected areas (MPAs).

Fisheries governance

The government has clearly recognized that giving local communes more power to manage their own resources is the most effective way of managing them sustainably. Collaboration between national/local authorities and

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THAN THI HIEN



Small-scale fisheries in the small island of Quy Nhon City, Binh Dinh province, Vietnam, where fisher communities work collaboratively with the government to manage the resource

issues of recognized community groups and fishing rights in the protection and management of aquatic resources. The MPA regulations are being revised to include: (i) the management structure of an MPA; (ii) the co-ordination mechanism; and (iii) sustainable financing, including tourism fees in MPAs. Besides, there will be a focus as well on how to ensure biodiversity protection in the defined core and buffer zones of the MPAs.

Once the law is implemented, co-management groups will be required to create their own fishery management plans in accordance with the details set out in the decrees and guidelines, with help from provincial and commune-level authorities. The Directorate of Fisheries will develop an action plan to support the co-management and community groups over the coming year, and help mobilize the available financial, human and technical resources. 3

communities is essential. Over the coming year (until implementation on 1 January 2019), the next steps include: (i) communication and education so communities understand the amended law's benefit; (ii) development of under-law documents (decree, circulars, guidelines); (iii) policies to support fisheries management at both national and local levels, including factoring in financial resources, human resources and technical resources; and (iv) enforcement, implementation and monitoring of laws and regulations. MCD is continuing to work with the Directorate of Fisheries, and has co-hosted workshops to inform stakeholders of the implications currently impacting both the co-management decree and the regulations on MPAs. The co-management decree is being drafted to cover the most significant

For more



<http://mcdvietnam.org/vietnam-government-empowers-fisherman-in-landmark-passage-of-amended-fisheries-law/>

Vietnam Government Empowers Fisherman in Landmark Passage of Amended Fisheries law

<https://www.icsf.net/en/samudra/article/EN/63-3800-Small-scale-hop.html>

Small-scale Hopes

<http://mcdvietnam.org/en/>

Centre for Marinelife Conservation and Community Development (MCD)

Women Rising

A critical look at *Towards Gender-equitable Small-scale fisheries Governance and Development: A Handbook* by Nilanjana Biswas, published by the FAO, in 2017

It was a pleasure to read through Nilanjana Biswas' *Towards Gender-equitable Small-scale Fisheries Governance and Development: A Handbook*, part of a larger series of initiatives designed to support the implementation of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). The SSF Guidelines were several years in the making and involved extensive consultations with diverse groups from more than 120 countries. They were endorsed by the Thirty-first Session of the FAO Committee on Fisheries (COFI) in 2014.

As indicated in the Foreword, they are "the first internationally agreed instrument dedicated entirely to the immensely important—but until now, often neglected—small-scale fisheries sector." They are global in scope but there is a specific focus on developing countries which are home to most of the world's small-scale fisheries (SSF). While constituting a very significant accomplishment, the Guidelines are technically voluntary, although, as argued by Svein Jentoft (see For more box below), their linkage to international human-rights laws, including the Convention on the Elimination of all Forms of Discrimination against Women, makes them less voluntary than they appear. That said, using them to help achieve meaningful change on the ground requires ongoing effort.

Since 2014, the FAO has been spearheading extensive consultations with diverse stakeholders as a way to support the implementation of the SSF Guidelines. These consultations resulted in a request for more information on how to address gender

issues. One reason for this is that the SSF Guidelines include, among their core objectives and guiding principles, the principles of gender equity and equality. Biswas' handbook is designed to help address this request.

As noted by Kleiber et al. (see For more on page 63), "[t]he presence of gender equity and equality in the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries... is unprecedented in global fisheries policy." The last time I worked intensively on gender and fisheries issues was a decade ago when I was one of the leads on a gender, globalization and fisheries initiative

The handbook extends the long tradition of community-engaged consultations and regional and international initiatives...

that brought together researchers and representatives from civil society organizations (CSOs) from multiple developed and developing countries, including the Women in Fisheries programme of the International Collective in Support of Fishworkers (ICSF).

Changing tides

We hosted a workshop in Newfoundland and produced a video called *Changing Tides: Gender, Fisheries and Globalization* and an edited collection of articles and stories with the same title (<http://toobigtoignore.net/curra/>). At that time, despite more than a decade of research and activism on gender/women in fisheries (particularly through ICSF), women

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and gender issues were largely invisible in fisheries research and particularly in policy throughout the world. Something like the SSF Guidelines, with its attention to women and to gender, was, for me at least, unimaginable.



FAO. 2017. Towards gender-equitable small-scale fisheries governance and development - A handbook, by Nilanjana Biswas. Rome, Italy. <http://www.fao.org/3/a-i7419e.pdf>

The handbook under review extends the long tradition of community-engaged consultations and regional and international initiatives that informed the ICSF Women in Fisheries programme and the development of the SSF Guidelines to the

each section linking explicitly to relevant chapters in those guidelines. The focus is on developing countries and discussions of broad concepts like gender equality (“when women and men enjoy equal rights, opportunities and entitlements in civil and political life”) and equity—the achievement of “fairness and impartiality in the treatment of women and men in terms of rights, benefits, obligations and opportunities”, are thought through in relation to the relevant Guidelines chapter.

Each chapter includes one or more case studies, as well as useful analyses of the case studies and suggested action points for policymakers and CSOs related to the kinds of scenarios outlined in the case studies. It emphasizes the need to take a value-chain approach to fisheries, encompassing the full supply chain as essential to capture the full range and extent of women’s involvement in fisheries, and to identify both points of vulnerability and options for improving their lives and livelihoods. It also reminds us again of the ongoing and longstanding invisibility of much of women’s work in many statistical and other resources on fisheries.

Consistent with the approach in the SSF Guidelines, Part 2 of the handbook uses a gender lens to examine responsible governance of tenure and the impact of loss of use rights, ownership rights and the transferability of tenure on women in different contexts. The section on sustainable resource management explores issues related to the need to strive for the equitable participation of women and marginalized groups in fisheries management and the design of protected areas. Chapter 4 of Part 2 brings a gender lens to social development, employment and decent work within SSF, calling for recognition of women’s paid, unpaid and subsistence work, and the need to promote decent work opportunities for women in SSF. A case study of migrant Chinese women workers in oyster shucking in Japan draws attention to the part of the SSF Guidelines that

implementation phase. It does this both in terms of the process that informed its development, and its contents. Contributions to an online survey, two regional workshops and an Expert Workshop on Gender-equitable Small-scale Fisheries, linked to the SSF Guidelines, helped inform the development of the handbook. Its target audiences include governments, as well as fisher/fishworker and CSOs and other actors, including researchers.

The handbook is organized into three parts: Part 1, on understanding gender and the role of women in SSF; Part 2, on responsible fisheries and sustainable development through a gender lens; and Part 3, on ensuring an enabling environment for gender equality and supporting implementation. It follows the structure of the SSF Guidelines, with

require States and employers to offer similar protections to international migrant workers as to local workers.

This section also draws attention to occupational health and safety issues experienced by women in different contexts, including the threat of violence. Chapter 5 focuses on value chains, post-harvest and trade, including women's roles in markets, processing and other forms of trade. It offers examples of policy and other initiatives that threaten women's livelihoods in these areas, and examples of initiatives—often led by women—that have benefitted them. The case study of the organization of women vendors and their success in reclaiming the Marol fish market in Mumbai, India, inspires and the linked analysis of the case points to many parts of the SSF Guidelines that enjoin States to fulfill multiple duties essential to supporting women's post-harvest work.

The discussion of the role of trade liberalization and globalization and related increase in non-tariff barriers to trade related to food, sanitary and other standards that constrain women's ability to produce for export, and often undermine their access to local fish, is reminiscent of the earlier work we did on the gendered impact of these changes. The handbook also has a chapter on gender equality and gender-equitable policy implementation, with case studies showing what can happen when women are neglected in policy implementation, as well as one on disaster risks and climate change, including indicators for developing gender-sensitive disaster-reduction strategies.

Part 3 explores initiatives that can help to ensure an enabling environment for gender equality and to support the implementation of the SSFs Guidelines in ways that will help to achieve the promise they hold for women fishworkers and their families. Attention to women's relationship to natural and man-made disasters is essential in the context of climate-change hazards and ongoing problems with

overfishing, pollution and other challenges. It was the silence around impacts on women of the collapse of Newfoundland and Labrador's cod stocks that motivated my last intensive foray into the field of gender equality and fisheries, and that led to my opportunity to join, for a time, the international network of women activists and researchers working on gender and fisheries.

In 2010, the ICSF Women in Fisheries programme celebrated its 20th anniversary with the publication of a retrospective report entitled *ICSF's Journey with Women in Fisheries*, co-authored by Nalini Nayak, Cornelie Quist and others (see the Women in Fisheries webpage for a list of the many publications from this programme). In that report, they noted, “[i]t has taken FAO a quarter of a century to seriously focus on a standard for small-scale fisheries... It has taken as long for us in ICSF to collectively agree on the importance of a gendered perspective in fisheries—despite the fact that the crucial role of women in fisheries has been recognized from the very beginning.”

In recent years, new researchers, including particularly those involved with the Gender in Aquaculture and Fisheries Group within the Asian Fisheries Society, have supported ongoing research in the area, and are now in the process of organizing their first standalone Global Symposium on Gender in Aquaculture and Fisheries to take place this coming October. While I have not seen an analysis of the processes that led to the inclusion of gender equality and equity in the SSF Guidelines, I am convinced that all of this intensive and sustained background legwork played a crucial role. One indication of this is the dedication of the Guidelines to the memory of ICSF's Chandrika Sharma who worked tirelessly on both the SSF and women in fisheries fronts. Ongoing support like that which made this handbook possible is essential if the Guidelines are to achieve their objectives for women and men in SSF globally. ♀

For more



<https://maritimestudiesjournal.springeropen.com/articles/10.1186/s40152-014-0016-3>

Walking the Talk: Implementing the International Voluntary Guidelines for Securing Sustainable Small-scale Fisheries by Svein Jentoft

https://www.researchgate.net/publication/317644549_Promoting_Gender_Equity_and_Equality_Through_the_Small-Scale_Fisheries_Guidelines_Experiences_from_Multiple_Case_Studies

Promoting Gender Equity and Equality Through the Small-Scale Fisheries Guidelines: Experiences from Multiple Case Studies by Kleiber, D., K. Frangoudes, H. T. Snyder, A. Choudhury, S. M. Cole, K. Soejima, C. Pita, A. Santos, C. McGougall, H. Petrics and M. Porter. 2017.

Co-operate to Move Forward

An Africa Workshop focused on creating awareness about the SSF Guidelines, lobbying for their implementation, and aligning them with national fisheries policies

Despite the already highlighted importance of small-scale fisheries (SSF), the acknowledged need to develop infrastructure for improving post-harvest handling facilities for fisherfolk, and public investment in SSF is still very minimal in many communities. Little has been done to improve access to fisheries resources and social services. In Uganda, for instance, supporting private investors in fishing communities has taken precedence over supporting local communities that had supported food production in the country. Women's role in governance in the export-led

inter-governmental negotiations, also with the participation of civil society organizations, to guide interventions in SSF, aimed at eradicating hunger and promoting sustainable development.

Globally, threats to a smaller-scale mode of food production in fisheries have intensified, expropriating from the many and appropriated by a few. Interventions from other sectors, such as real-estate development, result in land acquisition along coastal and inland waters that restrict fisherfolk's access to fishing grounds. Global arrangements for funding of the development of water bodies further contribute to the demise of SSF, on which more than 200 mn people worldwide depend for their livelihood.

Strategies discussed by the 31 members of the WFF from the five continents were to amplify the voice of small-scale fisher communities, complemented by concerted efforts at the regional level, where issues that affect small-scale fishers were shared. The strategies focused on creating awareness about the SSF Guidelines, lobbying for their implementation, and aligning these Guidelines with national fisheries policies as they strengthen and give more importance to small-scale fishing communities.

Social development

The meeting also evaluated the regional capacity-building workshops carried out in Asia and Latin America. The lessons learned from the completed regional workshop guided the preparation of the Africa Regional Capacity-building Workshop that was hosted by the Association pour le développement de la pêche (ATDEP), in Tunisia, in September 2017.

Globally, threats to a smaller-scale mode of food production in fisheries have intensified, expropriating from the many and appropriated by a few.

fishery industry, and their access to fish for trade and local consumption, are declining over time.

The World Forum of Fish Harvesters & Fish Workers (WFF) had its General Assembly, held every three years, in January 2017 in Salinas, Ecuador, hosted by FENACOPEC, a member from Ecuador. Discussion during the General Assembly explored members' capacities to implement the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (the SSF Guidelines), endorsed by the FAO Committee on Fisheries (COFI) in 2014, and also debated how to reach a consensus on an implementation plan. The SSF Guidelines were a product of

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The Africa workshop was meant to create awareness about the SSF Guidelines among the members present, which included leaders of small-scale fisher organizations from 13 African countries. The workshop also took into consideration the regional needs in SSF. It explored how members' interventions at the national level could contribute towards implementation of the Guidelines. The presentations revealed a rich experience in actions of small-scale fishing communities, inspiring WFF members to seek documentation of these for learning and continued transfer of good practices.

The formation of the African Women Fish Processors and Traders Network (AWFISHNET) was an important development, in which the WFF Co-President became the General Secretary. The Guidelines were translated into the local languages by ATDEP for the Maghreb region. The social-development initiatives that contribute to sustainability of the SSF were shared by KWDI from Uganda. Accounts of training of fishing communities by ATDEP and the Sierra Leone Artisanal Fishers' Union (SLAFU) were all inspirational stories on how to secure the livelihoods of fisher communities. Child-labour practices that are common especially in SSF were discussed to explore measures to curb them. Participants noted that in some countries, such as Mauritania, child labour is not a choice. It is imposed by the financial situation of the families, and by the customs or the politics of the region. In Tunisia, as reported by the participants, fishermen experience shortage of labour as young people do not want to practise fishing activity anymore. To remedy this shortage of labour, they are forced to make their sons work with them, thus transferring the tradition of fishing from father to son and from older to younger generations.

The Africa Workshop also sought the implementation of the Voluntary Guidelines for the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context



In January 2017, the 31 members of the WFF during the General Assembly in Salinas, Ecuador, discussed the strategies that could amplify the voice of small-scale fisher communities

of National Food Security (VGT), parallel to the SSF Guidelines, as loss of land adjacent to water bodies results in loss of fishing grounds, particularly of small-scale fishing communities. The need for intensified regional activities and co-operation, to engage with regional fisheries bodies and governance institutions such as the Inter-African Bureau for Animal Resources (AUIBAR), was emphasized. It is important to organize SSF communities, especially women, into co-operatives to enhance their production and increase their access to the markets. When small-scale fish producers are equipped with knowledge and skills to improve the quality of their production, processing and how to access and maintain markets, they can reduce post-harvest losses, claim a relative share of the fish market, and be able to produce in large quantities, as opposed to individual household production.

Governance of land, water and fisheries resources should be improved and put into the hands of small-scale fisherpeople who are directly engaged with, and are affected by, the poor governance of such resources. Privatization of resources, in many of the countries, has placed the resources in the hands of a few private investors, further marginalizing the local population/fisherfolk as they have no, or limited, access to the resources that they protect and that have been a source of their livelihoods for decades. 3

For more



<http://worldfisherforum.org/>
World Forum of Fish Harvesters & Fish Workers (WFF)

<http://www.katosi.org/>
Katosi Women Development Trust

<http://fenacopecu.blogspot.in/>
Federación Nacional de Cooperativas Pesqueras del Ecuador (FENACOPEC)

CLIMATE CHANGE

No More Tuna for Japan's Sushi?

Japan is the world's biggest consumer of tuna. Fishermen on the island of Iki are challenging official policy so as to stop the decline of Pacific bluefin tuna stocks.

Minoru Nakamura, a fisherman from Iki Island, recalled the biggest tuna he had ever caught, back in 2013. "It weighed 319 kilos. It was so big I couldn't get it into the boat, and I had to lash it to the hull." A fish this size being rare, it made the front page of the local newspaper. A photograph showed Nakamura next to his enormous catch, 2.7 meters long, hanging from a crane. He looked proud, but not ecstatic: Their precarious livelihood makes these independent fishermen

humble. "I can go for ten weeks without catching anything," he said at the time; today that sounds like a prophecy. This remarkable fish was one of the last Pacific bluefin tuna over 300 kilos to be caught off Iki.

Nakamura and his colleagues have petitioned the Fisheries Agency, part of Japan's agriculture, forestry, and fisheries ministry, several times. The agency maintains that falling catches are due to climate change. "They say the tuna have moved to the waters off Korea, where we're not allowed to fish," said Nakamura, who doesn't believe it. The fishermen blame the powerful industrial fishing vessels operated by big companies like

Nippon Suisan Kaisha (Nissui), which has 10,000 employees. These come from Sakaiminato, a mainland port 400 kilometers northeast of Iki. They started catching adult tuna in the Sea of Japan in 2004, the year Iki's fishermen began to see their catch fall. Sakaiminato vessels seek out schools of tuna with sonar, then encircle them with a purse seine more than 1 kilometer in circumference. They catch up to 50 tons each time they deploy the net, and a total of 1,500 tons in June and July, when they fish most intensively. The Iki fishermen, who use pole and line, rarely catch more than 1.2 tons a month per boat.

Such intensive fishing is "a heavy burden on the environment," says Kazue Komatsubara, an ocean campaigner with Greenpeace Japan. "It allows them to catch

large numbers of fish of all sizes and species." According to a report by the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC), nearly 60 percent of all tuna landed by Japanese vessels in the last three decades have been caught by this method.

—from a report in The Nation by Yuta Yagishita <https://www.thenation.com/article/no-more-tuna-for-japans-sushi>

FISHERIES LAW

Sami Village Wins Court Battle

A Sami village has won a court battle with the Swedish state over hunting and fishing rights in its territory, being awarded significant compensation in the process.

The Swedish Court of Appeal decided that the Sami village of Girjas now has what is described as "a better right" to determine hunting and fishing in its territory, but not the "sole right" to manage hunting and fishing permissions independently of the state.

The village still has to work together with the state and be in agreement with the local county government, according to the verdict. Sami villages are cooperatives that organize reindeer herding within specific geographical areas—there are 51 in Sweden.

The verdict may not be entirely perfect for Girjas, but the court has also ordered the losing party—the Swedish state—to pay the village approximately four million kronor (US\$499,800).

The Sami village of Girjas has been to court on several occasions over the village's right to determine hunting and fishing in the territory. In 2016, Girjas won its first court case against the Swedish state, providing the village with the right to have a say in fishing and hunting rights, but the state appealed.

Source: <https://www.thelocal.se/20180124/sami-village-wins-court-battle-and-compensation-from-swedish-state>

66

ORGANIZATIONAL PROFILE

Northwest Atlantic Marine Alliance (NAMA)

The Northwest Atlantic Marine Alliance (NAMA) is a fishermen-led organization building a broad movement toward healthy fisheries and fishing communities. Located in the northeast area of the United States, NAMA is the leading voice opposing industrial fisheries policies and industrial seafood markets. Their recent campaign work helped lead to the sentencing of the largest fishing fleet owner in the US, also known as the Codfather. For the past decade, they have been helping organize fishermen to form alternative, community-based economic models for selling their catch.

NAMA was set up in 1995 by a group of fishermen and fishing-community advocates to explore alternative management structures. We believed there had to be a better approach to protecting our oceans and managing our marine resources. NAMA set out on a decade-long pursuit of collaborative research and visioning toward realizing community- and ecosystem-based management.

In late 2007, NAMA went through a transition that led to the hiring of our new director, Niaz Dorry, in early 2008. After a re-evaluation of NAMA's work, two things emerged: (1) We decided to do work through the food system lens because we knew it would be a game changer and no other organization was approaching fisheries work through the food



system lens. (2) We adopted a new organizing model that uses a decentralized collaborative approach, convening the Fish Locally Collaborative (FLC). This approach was being used by friends at the Coming Clean Collaborative at the time with a great success in bringing a diverse cross-section of communities and allies working on the frontlines of eliminating persistent pollutants.

We see a future where a powerful network of

community-based fishermen, crew, fishworkers and their allies are organized effectively, a future where marine ecosystems are protected from industrialization, privatization and overexploitation, a future where vibrant and viable fishing communities thrive and support community-based fishermen.

Right now the ocean is in an unhealthy state due to multiple stressors, including climate change, toxic pollution, clear felling of forests, ocean acidification, fishing activities, industrial agriculture, industrial mining and drilling, seismic testing, privatization, consolidation, and more. We need to address all these issues in order to have a holistic approach to marine conservation and fisheries management.

Small- and medium-scale community-based fishermen must be the leading voice for the changes we seek. In order to do this, they must be supported by networks of diverse stakeholders that are well-connected, aligned around shared values, action-oriented, and working from the bottom up.

To learn more visit: <http://www.namanet.org/>

— by Brett Tolley, NAMA

SUSTAINABLE FISHERIES

2022 declared International Year of Artisanal Fisheries and Aquaculture

The United Nations, in a Resolution (A/72/L.12) of 22 November 2017,

Reaffirms the importance it attaches to the long-term conservation, management and sustainable use of the living marine resources of the world's oceans and seas and the obligations of States to cooperate to this end, in accordance with international law, as reflected in the relevant provisions of the Convention, in particular the provisions on cooperation set out in Part V and Part VII, section 2, of the Convention, and where applicable, the Agreement;

Encourages States, directly or through regional fisheries management organizations and arrangements, to establish and implement rebuilding and recovery strategies and plans where a stock is identified as being overfished, which should include time frames and probabilities of recovery aimed at bringing the stock back at least to levels that can produce the maximum sustainable yield, and guided by scientific assessment and subjected to periodic evaluation of progress;

Also encourages States to apply the precautionary approach and ecosystem approaches in adopting and implementing conservation and management measures addressing, inter alia, by-catch, pollution and overfishing, and protecting habitats of specific concern, taking into account existing guidelines developed by the Food and Agriculture Organization of the United Nations;

Encourages States to implement, individually and through regional fisheries management organizations and arrangements, accurate, complete, reliable and effective data collection and reporting of required data on catches, including by-catch and discards, reviewing and validating the data, and providing catch information in support of scientific stock assessment and ecosystem approaches to fisheries management;

Reaffirms paragraph 10 of its resolution 61/105 of 8 December 2006, and calls upon States, including through regional fisheries management organizations or arrangements, to urgently adopt and implement measures to fully implement the International Plan of Action for the Conservation and Management of Sharks for directed and non-directed shark fisheries, based on the best available scientific information, through, inter alia, limits on catch or fishing effort;

Calls upon States to take immediate and concerted action to improve the implementation of and compliance with existing regional fisheries management organizations or arrangements and national measures that regulate shark fisheries and incidental catch of sharks, in particular those measures which prohibit or restrict fisheries conducted solely for the purpose of harvesting shark fins and, where necessary, to consider taking other measures, as appropriate, such as requiring that all sharks be landed with each fin naturally attached;

Calls upon regional fisheries management organizations with the competence to regulate highly migratory species to strengthen or establish precautionary, science-based conservation and management measures, as appropriate, for sharks taken in fisheries within their convention areas consistent with the International Plan of Action for the Conservation and Management of Sharks;

Urges States to eliminate barriers to trade in fish and fisheries products which are not consistent with their rights and obligations under the World Trade Organization agreements, taking into account the importance of the trade in fish and fisheries products, particularly for developing countries;

Recalls that, in "The future we want", States committed themselves to observing

the need to ensure access to fisheries and the importance of access to markets by subsistence, small-scale and artisanal fisherfolk and women fish workers, as well as indigenous peoples and their communities, particularly in developing countries, especially small island developing States;

Takes note of resolution 6/2017, entitled "International Year of Artisanal Fisheries and Aquaculture", adopted by the Conference of the Food and Agriculture Organization of the United Nations at its fortieth session, held in Rome from 3 to 8 July 2017;

Proclaims the year beginning on 1 January 2022 the International Year of Artisanal Fisheries and Aquaculture, invites the Food and Agriculture Organization of the United Nations to serve as lead agency for the Year, in collaboration with other relevant organizations and bodies of the United Nations system, and stresses that the cost of all activities that may arise from the implementation of the present paragraph, above and beyond activities currently within the mandate of the implementing agency, should be met from voluntary contributions;

Urges States and relevant international and national organizations to provide for the participation of small-scale fishery stakeholders in related policy development and fisheries management strategies in order to achieve long-term sustainability for such fisheries, consistent with the duty to ensure the proper conservation and management of fisheries resources, and encourages States to consider promoting, as appropriate, participatory management schemes for small-scale fisheries in accordance with national laws, regulations and practices, as well as the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication of the Food and Agriculture Organization of the United Nations;

Welcomes action taken by the Food and Agriculture Organization of the United Nations and a number of regional organizations to support the implementation of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication through regional plans of action, dedicated working groups and other initiatives;

Encourages States, either directly or through competent and appropriate subregional, regional or global organizations and arrangements, to analyse, as appropriate, the impact of fishing for marine species corresponding to low trophic levels;

Welcomes, in this regard, the initiation of further studies by the Food and Agriculture Organization of the United Nations of the impact of industrial fishing activities on species corresponding to low trophic levels;

Invites the Food and Agriculture Organization of the United Nations to consider the potential effects of genetically engineered fish species on the health and sustainability of wild fish stocks and on the biodiversity of the aquatic environment and to provide guidance, consistent with the Code, on minimizing harmful impacts in this regard;

Also invites the Food and Agriculture Organization of the United Nations, in consultation with other relevant international organizations, including the International Maritime Organization, to promote awareness and cooperation to develop and strengthen capacity to prevent, minimize and mitigate the adverse impacts of invasive alien species on biodiversity, including fish stocks.

Source: Excerpts from UN. 2017. Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments, <http://undocs.org/en/a/72/L.12>

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

Islands in Flux: The Andaman and Nicobar Story. Pankaj Sekhsaria. 2017. HarperCollins India. 304p

A compilation of writings on key issues and developments in India's Andaman and Nicobar Islands over the last two decades, featuring information, insight and perspective related to the environment, wildlife conservation, development and the indigenous communities of these islands.

Social Issues in Sustainable Fisheries Management. Urquhart, J., Acott, T., Symes, D., Zhao, M. (Eds.). 2014. MARE Publication Series. Springer

An interdisciplinary mix of perspectives and studies on social issues in fisheries from a diverse range of case studies and research disciplines that makes a case regarding the dearth of attention to socio-cultural considerations which, to date, have been largely treated as an externality of fisheries policy.

Source: <http://www.springer.com/in/book/9789400779105>

Fishery Exports and the Economic Development of LDCs: Bangladesh, Cambodia, the Comoros, Mozambique, Myanmar and Uganda. 2016. UNCTAD

The study presents evidence from six case studies—Bangladesh, Cambodia, the Comoros, Mozambique, Myanmar and Uganda—and provides policy conclusions and recommendations for action by stakeholders in LDCs and their development partners.

Source: http://unctad.org/en/PublicationsLibrary/aldc2017d2_en.pdf

An inventory of new technologies in fisheries. Pierre Girard and Thomas Du Payrat. OECD, 2017

A compendium of new information and monitoring technologies that are potential game-changers for fisheries management and can help the 'green growth' of the sector.

Source: https://www.oecd.org/greengrowth/GGSD_2017_Issue%20Paper_New%20technologies%20in%20Fisheries_WEB.pdf

Hidden Chains: Forced Labour and Rights Abuses in Thailand's Fishing Industry. 2018. Human Rights Watch. 148p

This report documents forced labour and other human-rights abuses in the Thai fishing sector. It identifies poor working conditions, recruitment processes, terms of employment, and industry practices that put already vulnerable migrant workers into abusive situations—and often keep them there.

Source: <https://www.hrw.org/report/2018/01/23/hidden-chains/rights-abuses-and-forced-labor-thailands-fishing-industry>

Films

Climate Justice in Sápmi Oceans, The Voice of the Invisibles

This documentary follows the journey of a filmmaker who is preparing a report on the disappearance of marine species, and the dramatic situation of the seas. Is the protection of the environment the only objective of certain environmental NGOs. Source: <https://vimeo.com/168291011>

Women at the Water's Edge: Lives of Women in a Climate-changed Sundarbans

The film is based on ongoing research on the effects of climate change on women living in the villages of the Sundarbans in the Bay of Bengal.

Source: <https://www.youtube.com/watch?v=2Bl2NkP0k9k>

FLASHBACK

Don't wait to be swept away

“The hurricane showed no mercy to the children of the sea,” lamented a fisherman in the aftermath of Hurricane Thuth.

It was Saturday, 29 May 1999. “2A” or “Hurricane Thuth” travelled at the speed of an Avro aeroplane and hit the coastal border villages of India and Pakistan. About 300 people on the Indian side and around 500 on the Pakistan side perished. Thousands were rendered homeless. Almost all those who died on the Indian side, in the State of Gujarat, were fishermen.

After this devastating incident, we at ICSF received a letter from a Gujarat fisherman asking why we

do not carry any articles on aspects of safety of life at sea. His query made us sit up and think. *SAMUDRA Report* has, in fact, carried only

a couple of articles on safety at sea, an issue vital to the lives of fishworkers. This issue of *SAMUDRA Report* is our answer to the Gujarat fisherman's query.

In developed countries, in particular, modern fishing boats in the small-scale sector are taking on the features of larger ones, including heavy engines and deck machinery that make them sinkable as soon as they capsize or when they take in large amounts of water. In developing countries, introduction of modern technology has upset the traditional way of doing things. The introduction of outboard motors in the artisanal sector, for example, has led to the abandonment of sails and neglect of sailing. A lack of appreciation of the limits of modern technology; a tendency to take needless risks; insufficient training in operating engines, navigation, electronic aids and safety equipment; first aid and emergency behaviour all contribute to worsening safety standards in small-scale fisheries, even when no cyclones strike, as Ben-Yami points out.

There is need for internationally agreed rules for safety equipment and construction of small fishing vessels, and for the training and certification of their skippers and crew. There has to be a concerted move to enact legislation to minimize the risks and dangers in small-scale fisheries.

Fishworker organizations have to impress on their members the importance of taking safety aspects very seriously. Compared to developed countries, in developing countries human life may not appear to have any great value, but that is no reason to be complacent about safety matters and to get into action only when calamity strikes the coastal populations. Developing countries have to move from the syndrome of responding to catastrophes to one of putting a foolproof system in place.

—from Comment in *SAMUDRA Report* No.23, September 1999



ANNOUNCEMENTS

MEETINGS

IPC General Meeting

12–16 March 2018, Cape Town, South Africa

FAO Trade in Fisheries Services

20–22 March 2018, Gothenburg, Sweden

Regional Technical Seminar Prospectus—Joining forces:

The fisheries sector and promoting safety, decent work and the fight against IUU fishing
22–23 March 2018, Manila, Philippines

The Thirty-fourth Session of the FAO Regional Conference for Asia and the Pacific

9–13 April 2018, Nadi, Fiji

WEBSITES

Too Big To Ignore—Global Partnership for Small Scale Fisheries Research

<http://toobigtoignore.net/>

A global research network and knowledge mobilization partnership on addressing

issues affecting viability and sustainability of small-scale fisheries.

Low Impact Fishers of Europe (LIFE)

<http://lifeplatform.eu/>

An umbrella organization run by fishers for fishers to provide a clear and coherent voice at the EU level for the previously mainly silent majority of European fishers, who are smaller-scale and who use low-impact fishing gears and methods, but have historically lacked dedicated and effective

representation in Brussels and at the Member State level.

Alaska Sustainable Fisheries Trust

<http://www.thealaskatrutrust.org/>

The Trust's mission is to strengthen Alaskan fishing communities and marine resources through scientific research, education and economic opportunity. It aims to educate, activate and inspire consumers, while engaging community-based fishermen in programmes that promote healthy fisheries.



Endquote

The Sea of Cortez

***L**et us go, we said, “into the Sea of Cortez, realizing that we become forever a part of it; that our rubber boots slogging through a flat of eel-grass, that the rocks we turn over in a tide pool, make us truly and permanently a factor in the ecology of the region. We shall take something away from it, but we shall leave something too.”*

*—from the introduction to *The Log from the Sea of Cortez*
by **John Steinbeck***

