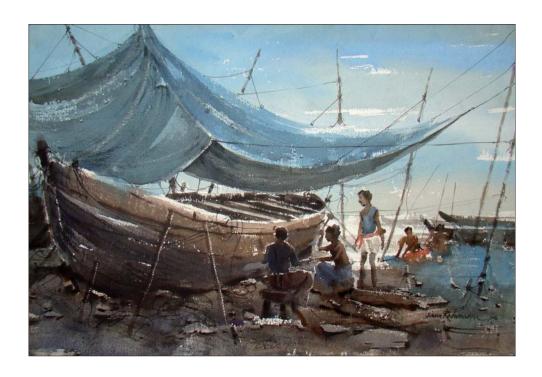
THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



Small-scale Inland Fisheries

Indigenous Peoples of Russia

The 41st IAMSLIC Conference

South Africa's Small-scale Fishing Communities

A People's Manual

32nd Session of COFI on Securing SSF



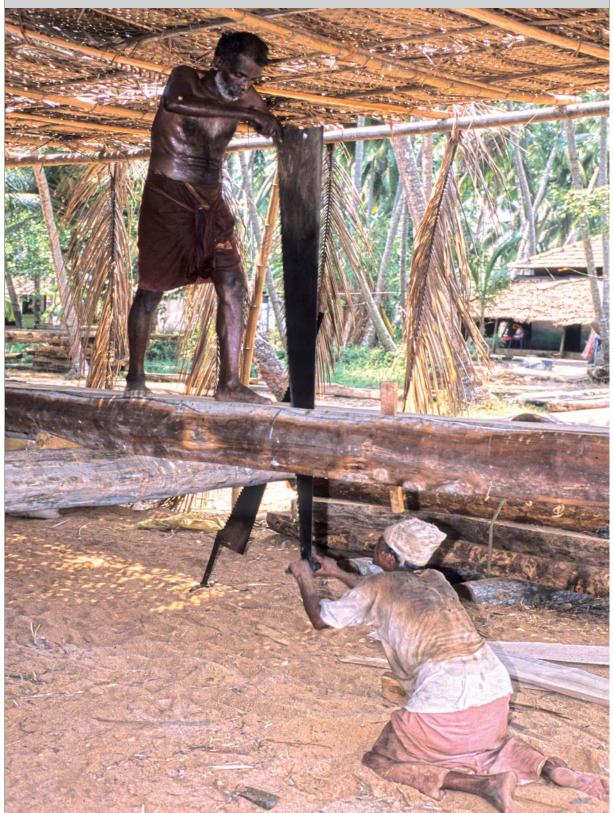
ICSF is an international NGO working on issues that concern fishworkers the world over. It is in status with the Economic and Social Council of the UN and is on ILO's Special List of Non-governmental International Organizations. It also has Liaison Status with FAO.

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

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

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

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



SAMUdRA

REPORT

THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS

NO.74 | AUGUST 2016





"Riverside" by Jiaur Rahman email: jiaur.rahman@yahoo.com

PUBLISHED BY

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

ICSF BELGIUM OFFICE Sentier des Rossignols 2 1330 Rixensart, Belgium PHONE: (32) 2–652 5201 FAX: (32) 2–654 0407 EMAIL: briano138531@gmail.com

EDITED BY

KG Kumar

DESIGNED BY P Sivasakthivel

ILLUSTRATIONS BY

Sandesh (sandeshcartoonist@gmail.com)

FOR LIMITED CIRCULATION ONLY

SAMUDRA News Alerts

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

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

BACK COVER



Imraguen fishermen of the Arguin Bank in their traditional craft lanche, Mauritania Photo by Olivier Barbaroux email: olivier.martine.b@wanadoo.fr

DEVIN BARTLEY / FAC

A valuable resource	4
Small-scale inland fisheries provide essential	
protein and micronutrients for millions	
RUSSIA	
In the country of volcanoes	8
The indigenous peoples of the Kamchatka	
Peninsula fight for their rights	

INDIA

ANALYSIS

Hemmed in by development 12Development has marginalized local fishing communities in Goa, India

ST.KITTS AND NEVIS

MYANMAR

Potential for transformation...... 19

Myanmar has the potential to use its fisheries and aquaculture sector for inclusive growth

REPOR1

on 'Blue Growth

SOUTH AFRICA

Caught in a net ______28
Small-scale fishing communities in South Africa
have to cope with unequal power relations

PEDAGOO	3 Y
---------	-----

MEKONG REGION

ANALYSIS

A time for reigning in?...... 40 Big environmental NGOs are being ceded

Big environmental NGOs are being ceded concessions without proper monitoring

${\tt CERTIFICATION}$

REPORT

The small and marginalized from Europe and Central Asia speak out

REPORT

Making SSF secure...... 52

The 32nd Session of the FAO Committee on Fisheries (COFI) discussed Agenda Item 9

COMMENT	3

ROUNDUP 58



Redeeming Small-scale Fishers

Greater visibility and recognition of inland fisheries could redeem small-scale fishers and fishworkers from being amongst the most impoverished class of community

early 150 years ago, Francis Day, the colonial Inspector General of fisheries in British India, wrote in his famous Report of the Fresh Water Fish and Fisheries of India and Burma that freshwater fishermen were amongst the most impoverished class of community, and were, as a result, seeking employment outside the subsector as railway and agriculture labourers and as petty traders.

The Food and Agriculture Organization of the United Nations (FAO) estimates that 60 mn people-

half of them, women—are fully or partially dependent on inland, small-scale fisheries in streams, rivers, lakes, reservoirs, floodplains and other wetlands, including rice fields and swamp lands, spread over 10 mn sq km worldwide, especially in Asia and Africa. They harvest nearly 12 mn tonnes

of fish—which was 5 mn tonnes in 1980—at a value of US\$9 bn (see article, page 4), providing a rich source of micronutrients, essential protein, vitamins and fats, particularly to disadvantaged local communities.

The current estimates of inland capture fishery production, although more than doubled since 1980, are believed to be much below the actual levels due to problems with under-reporting and poor data collection, resulting in underestimating its economic, social and nutritional benefits and contribution to livelihoods and food security.

Inland fishery production is likely to be much higher than the estimated inland capture fishery production if inland culture fishery production—the fastest growing fishery subsector in several Asian countries—is included in it. (Currently, the inland culture fishery production is mostly reported under freshwater aquaculture production.).

Such a nutritionally beneficial increase in inland fish production is achieved in spite of the fact that decisions regarding land and water use rarely favour inland fisheries, and that the legal and policy space accorded to inland capture and culture fisheries in the context of freshwater resources is often minimal and the consumptive use of water resources is typically given disproportional priority over non-consumptive uses such as fisheries.

Equitable and reasonable utilization of land and water resources, therefore, is essential to further

enhance the protection of life and livelihoods of inland fishing communities, as well as to provide access to affordable fish and nutrition to the rural poor. Adoption of an integrated policy of land and water uses should be advocated to realize the full fisheries potential of inland water bodies, taking cognizance of the fact that the economic cost of producing acceptable nutritious fish from inland capture and culture fisheries in healthy ecosystems is much less than that from marine fisheries.

> Further, considering that a significant share of inland fish production derives from waters shared by more than one nation, the nutritional security of vulnerable and marginalized sections, in particular, can be greatly enhanced in remote areas if an integrated river basin management approach

is promoted. This is to ensure that adequate water quantity and quality are maintained—including protection from indiscriminate pollution—for fisheries in shared water bodies. In this context, we encourage countries with shared watercourses to ratify the 1997 United Nations Convention on the Law of the Non-navigational Uses of International Watercourses, to deal with governance of non-consumptive use of international watercourses.

Towards making the subsector more visible and to bring recognition to the substantial contribution of inland fisheries to food security and poverty eradication, we welcome the implementation of the Rome Declaration: Ten Steps to Responsible Inland Fisheries in conjunction with the SSF Guidelines and other instruments, such as the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Greater visibility and recognition of inland fisheries, we hope, will lead to the subsector being favourably included in policy discussions on how water is managed and the subsector benefiting from decisions regarding land and water use.

Such a transformation, we are sure, can definitely lead to retaining freshwater fishers and fishworkers in inland fisheries as their principal source of livelihood. It could, finally, redeem them from being amongst the most impoverished class of community.

A Valuable Resource

The value of small-scale inland fisheries lies in its ability to provide essential protein, micronutrients, vitamins and fats for millions of people, particularly in developing countries

nland fisheries are almost all small-scale fisheries (SSF). The problems of inland fisheries are SSF problems and include access rights, tenure, gender, social welfare and empowerment. More than 60 mn people rely on inland fisheries for at least part of their livelihood and about half of them are women. An estimated 71 low-income countries, in fact, currently produce about 80 per cent of global inland capture fishery production. Inland capture fisheries provide essential protein, micronutrients, vitamins and fats for millions of people, particularly in developing countries.

Inland capture fisheries represent a valuable resource for many rural communities around the world...

Although there have been improvements in technology and efficiency for industrial fishing, for many small-scale fishers the hooks-and-line, traps, crowding and

aggregating devices, and fixed and moveable nets that are based on developed techniques long ago are still the main choice to harvest the diversity of inland aquatic habitats. The gears are usually inexpensive and simple to operate once experience has been gained.

Unlike industrialscale fisheries where technology and machines harvest fish with a minimum of human labour, small-scale inland fisheries are usually labour-intensive, requiring a minimum of technology, and the products are consumed locally. Inland capture fisheries represent a valuable resource for many rural communities around the world, and particularly for those rural areas which do not have any access to marine fishery products, either because they are too far from the sea or because they do not have the cash to purchase them.

There are more than 10 mn sq km of lakes, reservoirs, rivers, floodplains and other wetlands around the world which could support inland capture fisheries. Some of these areas are in colder latitudes and may not be very productive. However, there are plenty of freshwater resources in the world's tropical and sub-tropical regions and this is where most of the world's inland fish is caught.

Developing countries harvest the most from their inland waters, with more than 90 per cent coming from Asia and Africa (Table 1). It seems that the world's catch from inland waters has been steadily increasing over the last decades, but it is unclear

Table 1. Production from inland capture fisheries by continent in 2014 (FAO Yearbook 2016)

Continent	Quantity (tonnes)	Per cent contribution
Asia	8,114,835	68.2
Africa	2,855,870	24
Latin America	497,548	4.2
North America	48,649	0.4
Europe	360,677	3.0
Oceania	18,302	0.2
Total	11,895,881	100

This article is by **Devin M. Bartley** (Devin.Bartley@fao.org), **Simon Funge-Smith** (Simon.FungeSmith@fao.org), **Gerd Marmulla** (Gerd.Marmulla@fao.org), **Nicole Franz** (Nicole.Franz@fao.org) and **Felix Marttin** (Felix.Marttin@fao.org) of the Fisheries and Aquaculture Department of FAO, Rome

whether this reflects an actual increase or simply better monitoring and reporting. Certainly, there are signs of greater management of water bodies in some regions to promote productivity, with active stocking and enhancement contributing to higher production.

Most of this inland catch is made up of carps and other carp-like species, tilapia, Nile perch, mussels, crustaceans and Hilsa shad. However, it would be a mistake to assume that there are only a few species; over half of the world's inland fishery catch is not identified to species or even family level (Table 2). Eighteen per cent of the catch is comprised 314 reported species, 55 per cent are simply not identified. Inland fisheries can be extremely biodiverse and it is now increasingly apparent that freshwater ecosystems and their fisheries are under threat from habitat loss, pollution and unsustainable fishing. From field studies, we know that inland fisheries actually represent a tremendous diversity of species, all of which are somehow utilized and valued by the rural people who harvest them:

- 1,100 different aquatic species in the Mekong river
- 2,500 species in the Amazon river
- 1,073 species in the Eastern Himalayan region

Many of the species are quite small and may be eaten whole, providing a rich source of micronutrients and adding important quality to diets that may otherwise be relatively poor. A small fish the size of your index finger provides the daily iron and zinc requirement of a small child. Small-scale fisheries from rice fields are especially difficult to collect catch information from, and yet rice fields can produce over 100 different aquatic animal species. Fish, insects, amphibians, snakes and molluscs are collected, often by women and children.

FAO reported 11.9 mn tonnes of fish were harvested from inland waters in 2014. However, FAO also reported that this figure, derived from official country reports, is a likely underestimate of the real

Table 2. Catch from inland capture fisheries (2014)

Nei = not elsewhere included, i.e. not identified to species

(SOFIA 2016)

FAO English name	2014	Per cent
Freshwater fishes nei	6,566,216	55
Other 314 species included in the FAO database	2,091,308	18
Cyprinids nei	713,104	6
Tilapias nei	410,929	3
Silver cyprinid	353,242	3
Freshwater molluscs nei	334,192	3
Nile perch	251,484	2
Nile tilapia	233,811	2
Freshwater siluroids nei	167,340	1
Common carp	145,566	1
Oriental river prawn	137,677	1
Siberian prawn	137,676	1
Hilsa shad	133,114	1
Torpedo-shaped catfishes nei	116,672	1
Snakeheads (= Murrels) nei	103,550	1
Total	11,895,881	100

production from inland waters. Thus, the value of these fisheries to rural communities and small-scale fishers is also underestimated. We often struggle to imagine the value of these hidden inland fisheries, but FAO and the World Bank have estimated that the global value of inland fisheries is over US\$9 bn. Some figures for other studies give values even more than this.

- The Mekong River in SouthEast Asia has an estimated 'first value' of its fishery catch of over US\$3-4 bn alone.
- In Africa, Lake Victoria's fisheries are valued at US\$850 mm, and the Columbia river in the US is valued at over US\$100 mm.
- Other studies have indicated the West and Central African fisheries have a value of over US\$700 mn.
- Much of this catch is never seen in the mainstream economy, but has a substantial hidden contribution where we have looked closely. In some cases—for example, Indonesia's swamp lands—can

Table 3. The linkages between the 2015 Rome Declaration: 10 Steps to Responsible Inland Fisheries (http://www.fao.org/3/a-i5735e.pdf) and the SSF Guidelines (www.fao.org/3/a-i4356e.pd)

The Steps		Chapters from SSF Guidelines
Step 1: Improve the assessment of biological production to enable science-based management	5	Governance of tenure in small-scale fisheries and resource management
	10	Policy coherence, institutional coordination and collaboration
	11	Information, research and communication
	5	Governance of tenure in small-scale fisheries and resource management
Step 2: Correctly value inland	6	Social development, employment and decent work
aquatic ecosystems	10	Policy coherence, institutional coordination and collaboration
	11	Information, research and communication
	1	Objectives
Step 3: Promote the nutritional value of inland fisheries	6	Social development, employment and decent work
	7	Value chains, post-harvest and trade
Chan A. Davidson and immune	5	Governance of tenure in small-scale fisheries and resource management
Step 4: Develop and improve science-based approaches to fishery	10	Policy coherence, institutional coordination and collaboration
management	11	Information, research and communication
Step 5: Improve communication	10	Policy coherence, institutional coordination and collaboration
among freshwater users	11	Information, research and communication
	5	Governance of tenure in small-scale fisheries and resource management
Step 6: Improve governance, especially for shared waterbodies	10	Policy coherence, institutional coordination and collaboration
especially for shared water sources	12	Capacity development of stakeholders
	5	Governance of tenure in small-scale fisheries and resource management
Step 7: Develop collaborative	9	Disaster risks and climate change
approaches to cross-sectoral integration in development agendas	10	Policy coherence, institutional coordination and collaboration
	12	Capacity development of stakeholders
	3	Guiding principles
Step 8: Respect equity and rights of stakeholders	6	Social development, employment and decent work
	8	Gender equality
Step 9: Make aquaculture an	10	Policy coherence, institutional coordination and collaboration
important ally	11	Information, research and communication
Step 10: Develop an action plan for global inland fisheries		All articles

provide more income than rice, if managed properly.

• Recreational fisheries in the US and Europe are valued at over US\$30 bn.

Accurate information on current vields from inland fisheries are essential for making effective foodsecurity and conservation efforts, but many countries lack the means to collect data from the varied small-scale, often seasonal dispersed, inland fisheries. In a world where there is already strong competition for fresh water (water extraction for agriculture is expected to double by 2050), it will be essential for the inland fisheries sub-sector to demonstrate the value of managing water for fish as well as for irrigation, hydro-electric power generation and other uses. Too often the sub-sector is left out of policy discussions on how water is managed.

However, the freshwater aquatic habitat, its fishery resources and the people who depend on them are being impacted and threatened by the needs of an ever-growing human population. In spite of the importance of inland fisheries to rural livelihoods, and food security and nutrition, this sub-sector remains largely absent from many national and global discussions. To date, the international effort to effectively integrate inland fisheries into the broader development agenda has fallen short of what is needed.

There has been significant progress in promoting awareness of small-scale fisheries and inland fisheries. The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) is an instrument negotiated by the international community that speaks to the rights and desires of small-scale fisheries, environmental sustainability. and The SSF Guidelines, although a voluntary instrument, was agreed by consensus and, therefore, also by the governments, of the fishers and communities involved. Furthermore, as recently reported in the SAMUDRA News Alerts of ICSF, the 32nd Session of the FAO Committee on Fisheries



A fisherwoman processing trey riel (*Henicorhynchus spp.*) with salt from the *dai* fishery on the Tonle Sap river in Cambodia

(COFI) called on FAO and partners to work toward implementation of the Rome Declaration: 10 Steps to Responsible Inland Fisheries (Table 3) in conjunction with the SSF Guidelines and other instruments, such as the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, as appropriate.

Clearly, the Rome Declaration represents actions to implement the principles of the SSF Guidelines. The lack of accurate information on the value of inland fisheries will need to be addressed in order for the sector to meaningfully engage in the political discussions on tenure, governance how water is managed. Mechanisms need to be put in place where these discussions can take place: currently, less than half of international or shared inland water bodies have international agreements on their management and only II per cent have a mandate covering fish. We hope that the 10 Steps and the SSF Guidelines will help bring more benefits to inland fishers and their communities by increasing awareness of the value of inland fisheries, especially small-scale inland fisheries, and by motivating policymakers and governments to implement these and instruments as soon as possible.

For more

fao.org/fishery/statistics/software/fishstati/en

FAO Yearbook. Fishery and Aquaculture Statistics. 2014 Capture Production. FAO, Rome, Italy. 2016

fao.org/3/a-i5711e.pdf

Freshwater, Fish and the Future: Proceedings of the Global Cross-Sectoral Conference. FAO, MSU, AFS Co-publishers. 2016

fao.org/fishery/sofia/en

State of World Fisheries and Aquaculture. FAO, Rome. 2012, 2016

fao.org/3/a-i4356e.pdf

Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. FAO, Rome. 2015

fao.org/docrep/016/i2801e/i2801e.pdf

Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. FAO. Rome. 2012

In the Country of Volcanoes

For the indigenous peoples of the Kamchatka Peninsula, the 'fish province' of the Russian Federation, fighting for their rights to access fishing resources is crucial

here are 40 communities of indigenous peoples living in Russia who are labelled under Russian law as "Indigenous small-numbered peoples of the North, Siberia and the Far East of the Russian Federation". This is a collective term for peoples with a population of fewer than 50,000 each, who inhabit two-thirds of the Russian territory in the Arctic and Asian parts of the country. The number of indigenous peoples of the Russian North is less than

The indigenous peoples of Russia remain among the poorest of the population...

0.2 per cent of the Russian population in total (approximately 250,000 to 300,000). Their traditional livelihood is based on fishing, hunting, reindeer husbandry and gathering. More than two-thirds of them continue to live in rural areas where these activities are still indispensable sources of food and income. Due to their traditional livelihoods, most of the indigenous peoples of the Russian North, especially those who preserve a nomadic way of life, need much more territory for subsistence than other populations of the country. The indigenous peoples of Russia remain among the poorest of the population in terms of social and economic development, as well as life expectancy, which is far below the national average.

The Kamchatka Peninsula, located in the northeast of Eurasia, is washed by the waters of the Sea of Okhotsk, the Bering Sea and the Pacific Ocean. Kamchatka is called 'the country of volcanoes', because the peninsula is located in the seismic zone. Kamchatka is also the 'fish province' of Russia as it is well known for the wealth of its fish and other aquatic bio-resources. Kamchatka is one of the regions of the Russian Federation with a highly developed fishing industry. The fishing industry dominates the Kamchatka's economy. The Okhotsk, Bering and Pacific coastal waters of the Kamchatka Peninsula belong to the most productive fishing zones of the world's oceans. The share of the Kamchatka region in the total fish harvest of the Russian Far East is more than 32 per cent and comprises about 21 per cent of the total fish harvest of the Kamchatka's Russian Federation. fish-processing industry produces about 700,000 tonnes of fish and fish products annually.

The main rivers of the peninsula are renowned for their abundance of salmon. The local indigenous peoples depend on hunting, reindeer herding and gathering but, historically, fishing has played a key role in their traditional sources of livelihood. Their most important occupation during the summer is salmon fishing.

Local stakeholders

At the same time, the fishing industry is the basis of the general local economy and is one of the main contributors to the regional budget. Thus, access to fishing grounds and fish quotas is a crucially important issue for all local stakeholders, including the government, businesses and indigenous peoples. The indigenous communities have become unwilling competitors with the big fishing

This article is by **Dmitry Berezhkov** (arctic.consult@yahoo.com), of Arctic Consult, Tromsø, Norway

companies since they both depend on the same resources. Often the indigenous rights to fishing resources in Kamchatka are violated by the government or commercial companies who grab the traditional indigenous peoples' fishing grounds, practise an inequitable distribution of fishing quotas which favours big business, and develop unfair legislation that restricts the indigenous peoples' rights on fishing.

Consider the case of the Itelmen community of Kovran, which is located in the northwest of the Kamchatka Peninsula on the coast of the Sea of Okhotsk. The Itelmens are the most ancient people in Kamchatka. The oldest settlements discovered by archaeologists show that Itelmens have been living in Kamchatka for about 15,000 years. Since ancient times the main occupation of the Itelmens has been salmon and smelt fishing in the Kamchatka rivers, and fish has traditionally been a year-round source of nutrition.

During the summer, the Itelmens used to catch and dry the fish, and sour it in special pits for the long winter ahead. For smelt fishing, they would use devices that trap the fish without human intervention. The soured fish was fed to the dogs which have historically been the only form of local transportation. The Itelmens also hunted seals along the seashore and bears in the forests. Their main holidays were during the spring celebrations when the first salmon appeared in the rivers, followed, in the fall, by the great Alhalalalay holiday dedicated to giving thanks to the Earth for its gifts.

The Itelmens have lived across the whole territory of the Kamchatka Peninsula, from the north to the south. Due to conflicts, diseases and assimilation into the Russian Empire and the Soviet Union, the Itelmens' population declined dramatically over time. Today there are only a small number of Itelmens. Only 3,000 Itelmens live in Kamchatka today. Kovran village, which was a centre for the forcible resettlement of indigenous population in the Soviet regime, is the only community

where the Itelmens form a majority of the population—around 300. The Itelmens' language is fast disappearing and there are only a few alive who can speak Itelmen. Today the main language of communication is Russian.

During the Soviet era, the main population of Kovran village worked in the local state fishing enterprise (kolkhoz) which served the public needs of the Soviet state, drawing on the Itelmens' traditional fishing grounds and tools. As compensation, the state provided salaries, education and other state services for the local population. After the disintegration of the Soviet Union, the economy crashed, the Itelmens' fishing enterprises were privatized and they had to learn to survive without any support from the state.

At the start of the 1990s, the local people decided to organize their own fisheries enterprise and fish for themselves on their traditional fishing grounds on the Kovran river. They delivered their catch to the processing factories in the neighboring Ust-Khayrusovo village. They got back half their catch as frozen fish, which they then sold to commercial ships around the Kamchatka coast.

The Itelmens also started to restore their ancient traditional cultural ceremonies like the Celebration of the First Fish or the Alkhalalalay holiday, which attracted researchers, and tourists. In 1998 the community



Kovran village fishers setting up *Zapor*, the traditional indigenous fishing tool for Kamchatka in Kovran river

teamed up with the regional government to establish a traditional territory, called "Thsanom", which became the first official territory in Russia specially designed for the development of indigenous peoples' traditional economy, culture and governance. Based on that experience, the Federal Government of Russia later developed the special federal framework law "On territories of traditional nature use of smallnumbered indigenous peoples of the Russian North, Siberia and the Far East"

The community, in co-operation with the regional government and environmental NGOs, began to develop their own plans for the local economy and governance of Kovran, including establishing a network of information centres, educational programmes, and security posts to fight illegal fishing.

Soon dry salted smelt fish became one of the most popular snacks in Russia. Prices began to rise and in 1999 the community decided to build its own fish factory in Kovran village to increase incomes. The regional governor supported the idea and the community even received some financial support from the state to buy the necessary equipment to freeze the fish. The case of the Kovran community and the Thsanom territory has since been looked up to as an example of the sustainable development of indigenous peoples in Russia.

However, in 2001 a new governor, who was a geologist and the head of the largest regional gold mining company, using a loophole in the federal legislation, rescinded the creation of the Thsanom territory, thereby undermining the selfgovernance of the indigenous community of Kovran. The community appealed to the courts and after several levels of litigation, in 2003 the European Court of Human Rights ordered the restoration of the territory and Thsanom the re-establishment of the territorial self-governance of the Itelmen procedural community. But technicalities prevented the court from ruling on land issues, which it does not cover.

Another stroke of misfortune hit the Itelmen community later when it lost the official right to fish in the Kovran river. Since the river is not rich in salmon, for many years the big commercial fishing companies showed no interest in fishing there. But following the rise of the price of smelt fish, big business started to pay attention to the river and in 2003 the authorities decided to open up the river to commercial fishing. After years of fighting for commercial tenders, in 2008 the local community lost the right to fish in the river as the fishing tender was won by a large commercial fishing company. Once the commercial exploitation of the Kovran river began, the stocks of smelt fish started decreasing dramatically. The Itelmens have only the right to fish for food on the seashore far away from their own village. Their native river now belongs to big business. The indigenous community has lost the right to sell fish and will be able to catch it only for their own consumption.

Today most of the male population of the village have no official jobs, as commercial companies prefer to hire fishermen from other regions. Alcoholism is rampant and the suicide rate in Kovran is several times higher than the Russian average.

New amendments to the Russian federal law on fishery in 2008 deprived the indigenous communities of their right to access the fishing grounds and required them to submit their bids as commercial tenders. large number of indigenous communities across the Russian North, Siberia and the Far East have lost their fishing grounds because of this change. Many fishing grounds previously designated for indigenous peoples were re-classified as industrial fishing grounds and leased to third parties through commercial tenders.

Populated territories

The Itelmens, who live in the most populated and most assimilated territories of the Kamchatka Peninsula,

face additional challenges in pursuing fishing. In 2009 a new federal governmental decree was adopted that delineated the places of living and traditional nature use of the indigenous small-numbered peoples of the Russian Federation. According to the decree, only on territories included in the list can indigenous peoples enjoy rights to their traditional livelihood and lifestyle. There are some indigenous regions in Russia that have not been included into the federal list. An example is the Murmansk region where only some municipalities are included in the list. Sami who live in these municipalities have the right to fish, while other Sami who live in municipalities elsewhere have no such right.

According to the census of 2010, the total indigenous population of Kamchatka is 14,368 people (4.5 per cent of the total Kamchatka population). The federal government decree of 2009 marked the whole territory of Kamchatka as a place for traditional living and traditional nature use of indigenous peoples, including those in the most populated southern districts.

That was a great victory for Kamchatka's indigenous movement, which has been fighting for this goal for 20 years, ever since the fall of the Soviet Union. Soviet officialdom did not consider the southern districts of Kamchatka as territories where indigenous peoples live as these districts are the most assimilated areas of the Kamchatka region. Today, however, about a third of the total indigenous population can be found there. The 2009 federal government decree confirmed the validity of the indigenous peoples' claims on access to the fishery resources in the southern Kamchatka districts.

Under pressure from the big fishing commercial companies, the Kamchatka authorities organized an official petition to the federal government requesting a change in the federal decree to exclude the southern Kamchatka districts from the federal list, arguing that the decision of the federal government would lead to conflicts between the

indigenous peoples and 'authorized users' of natural resources (namely, the commercial companies that won access to the fishing grounds on commercial tenders) who are the main contributors to the regional economy and budget. Another argument put forward was that the indigenous peoples in the southern districts amount to less than I per cent of the total population. The companies also pointed out that these territories are rich in oil and are important for the security of the state, and so including them in the list could "encourage separatism indigenous peoples" and could be "a threat to the energy security of the region".

To date, however, there has been no attempt to exclude the southern territories from the list as the authorities are afraid of massive protests by the indigenous population. But they have officially announced that a decision will be taken by the end of 2016. The indigenous communities of Kamchatka are understandably fearful of a negative decision, especially considering that in the recent past the Russian Federation has adopted several laws that prohibit protest actions.

The current legislation on self-governance and access to resources and lands is ineffective and not backed by the court system. Adding to the constraint are the restrictive changes to the legislation on resources and human rights legislation that have crept in over the last year.

Indigenous communities of the Kamchatka region can be effectively integrated into the business chains as the primary fishing links in remote regions—provided the legislation guarantees the communities' rights to access the fishing resources. If such rights are guaranteed, the communities can not only contribute to the fishing business but also develop activities to support themselves to eradicate poverty and social maladies.

For more

bit.ly/1rqEkzg

Indigenous Peoples' Experiences and Perspectives on the New International Standards in the field of Human Rights and Corporations

site.uit.no/urfolksforum/fdcip-2014-indigenous-movement-in-russia/

New Political Realities for the Indigenous Movement in Russia

base.garant.ru/195535/

Russian Federation Government
Decree of May 8, 2009 N 631-r
About Approval of the List of
Places of Traditional Residence
and Traditional Economic
Activities of Indigenous
Minorities of the Russian
Federation and the List of Types
of their Traditional Economic
Activities (as Amended)

Hemmed In by Development

A study of five fishing villages in Goa, India, shows how development in the region increasingly marginalizes local communities and deprives them of sources of livelihood

dxel, Cacra, Nauxi, Bambolim and Siridao are small fishing villages running from north to south along the western coast of Tiswadi taluka (an administrative district for taxation purposes) of the Indian state of Goa. They lie on the banks of the Zuari river, which, at 92 km in length, is the largest river in the state. (The port city of Vasco da Gama lies on the mouth of the Zuari river.) Panjim, the state capital, is just 5-10 km away, and the Goa University, part of which was built on land acquired from the local community, was set up in 1984.

The community was traditionally involved in farming and toddy tapping, with fishing being a supplementary source of income until the 1970s.

These villages have a population of about 3,300 inhabitants. The villages are mainly inhabited by the Gauda community, classified as Scheduled Tribe. The community was traditionally involved in farming and toddy tapping, with fishing being a supplementary source of income until the 1970s. After this period, with the introduction of 'disco nets' (synthetic gillnets) and the consequent increase in income, the communities started identifying themselves as fishers, with fishing contributing to a larger proportion of their income as compared to previous Agricultural lands being taken over in subsequent years further sealed their 'identity' as fishers.

With the Zuari river on one side, the state's highest seat of learning on the other, the only tertiary care hospital in the state a few km away, and the capital city so close, it would seem that these communities are poised for success. Unfortunately, this prime location has, over the years, been a coveted resource for other groups as well, forcing these communities to fight for their traditional rights, with their livelihoods and survival increasingly under threat.

In the early 1980s-by which time fishing had become the main source of income for the community the University started buying the agricultural and farm lands on which these communities traditionally grew crops-paddy, ragi, vegetables-for four months of the year. Apart from this, there were cashew plantations that provided the famed (local alcohol brew) of Goa. Taking advantage of the illiteracy of the Gaudas, the customary rights to these lands were gradually taken away by private owners, though the community continued cultivating the lands under lease agreements, without staking their claims as tenants.

Once the University started to acquire the lands, these owners sold some of their lands to the University. The University, spread over 427.49 acres, is built on what was earlier Cacra land, but is now called the Taleigao plateau. The University also got government land. The local people, not being registered as tenants, got no compensation but were promised jobs at the university instead.

Supplementary income

Today, several women from the fishing community supplement the family income by working as housemaids in the homes of the University staff. A few inhabitants have got jobs in the university. Following the

This article is by **Mariette Correa** (mariettec@gmail.com), Senior Programme Co-ordinator, ICSF

acquisition of the land by the university, one source of livelihood of these communities was destroyed forever. (Siridao, though, has been an exception since for over a generation there has been migration from the village to the UK and France, courtesy the Portuguese passports that Goans can use to migrate to the European region. Several people have bought trawlers, and fishing away from the Zuari river.)

In 1997, one of the big mining families of Goa, bought huge tracts of land adjoining Cacra with plans to start a project worth over Rs300 crore. This project involved the building of a large ramp, which would have blocked the canoes from going out into the river. The fishing communities protested and the project was stalled. Later, in 2008, the mega project entered into a fresh controversy over watering of the landscaping, which villagers stated was part of the project and which came under a no-development zone. However, the land is still owned by the Timblos and the community lives in the constant fear that permissions could be given at any time for them to 'restart' their project. Sanjay Pereira, the panch (village head) of Cacra ward for the Santa Cruz panchayat, says this project, if passed, will destroy the livelihoods of the community by preventing them from fishing.

There are also large residential houses and hotels which have come up in the area, despite constant protests by the villagers at the Gram Sabha meetings and at the relevant government offices. The increasing pressure on land has made the community feel insecure. While the fishing communities are not too worried about losing the land on which their houses are built being taken away (since they have documentation that guarantees security of tenure and since they belong to the Scheduled Tribes), they are unable to renovate or expand in accordance with their needs. Sanjay Pereira explains his own situation; being one of four brothers, they wanted to build two extra rooms adjoining their house, as the family is expanding. Two years ago a case was filed against them alleging that the expansion violated Coastal Regulation Zone (CRZ) rules, even though the CRZ Notification of 2011 permits construction/reconstruction of dwelling units of traditional coastal communities, especially fisherfolk, within 100 to 200 m of the no-development buffer zone (NDZ).

Sanjay points out the permissions given for building bungalows and hotels that are even closer to the river banks and clearly in violation of CRZ rules. When complaints are made against these constructions, the authorities interpret the rules to show how these are within permissible limits. Recent developments may make it easier for the communities to renovate or expand their houses, with the Ministry for Environment, Forest and Climate Change (MoEFCC) planning to amend the CRZ Notification by reducing the NDZ to a mere 50 m, ostensibly in the interests of the traditional fishing communities. The latter are, however, strongly opposing this move, claiming that dilution of CRZ norms will pave the way for the hotel industry and building lobbies to capture even more of the coast than they

already have. "This amendment is planned to protect and encourage the interest of the hotel mafia," Olencio Simoes, Secretary of the National Fishworkers' Forum (NFF) and the joint general secretary of Goenchea Ramponkaranchea Ekvott (GRE), alleged in a press statement.

Further, even if the communities have rights to the land, if they are unable to sustain livelihoods due to pressures from all sides, they will be forced to look for alternatives, possibly finally having to move out of the area.

As a direct result of the restrictions on expanding their houses, one of the big problems faced



A dugout canoe fisherman from a tribal community in Cacra, India, inspecting his fishing net

mainly by women and girls is the lack of toilets in the area. The homes are too small to allow construction of toilets, though about 20 per cent of houses in all these villages have managed to build these. The community has been requesting the government to build public toilets and has also identified three sites for these. Prior to elections, promises are made by candidates, but nothing is done once the elections are over. With men going out fishing early

Fishing is a family occupation and, unlike in the larger fishing vessels, no migrant labour is employed in these villages.

in the mornings, it is very difficult for women to find private spaces to relieve themselves. Girls tend to use the public toilets in schools.

There are a total of about 70 canoes of 6 m length and about 100 canoes of 8 m length fitted with outboard motors (OBMs) owned by these five fishing villages. The smaller canoes are involved in hook-and-line fishing and make three-hour trips, while the larger canoes go out for about an hour-and-a-half and use gillnets.

Subsidies are available for the fishing communities—Rs.36,000 per year for petrol, Rs. 60,000 for five years for OBMs, Rs. 30,000 for five years for gillnets and Rs.60,000 for a new canoe if registered as a fisherman. Apart from these, the fishermen are entitled to insurance schemes, financial assistance for house renovation and interest subsidies on certain loans.

The fishing ban of two months in the year during the monsoon (I June to 3I July) does not apply to these fishermen, as non-motorized canoes and motorized canoes fitted with up to IOHP OBMs and using gillnets are exempted from this ban. However, in any case, these communities do not fish much in this season, largely due to the weather.

Fishing is a family occupation and, unlike in the larger fishing vessels,

no migrant labour is employed in these villages. Once men come in with the catch, the women transport it via public buses to Panjim where they sell the catch to wholesalers. This is because they do not have space to sit in the Panjim fish market, as the spaces are allotted to women from different villages of Goa. Still, the women from these communities prefer this system as they are able to negotiate with the wholesalers and they are assured of selling their entire catch. They say that even though the price is lower than what they would get in the open market selling directly to consumers, they are comfortable with this system. A few women also sell fish locally at the Taleigao market.

There have been tremendous changes in the fish catch over the years. The post-tsunami period saw a massive drop in mussels and a reduction in oysters which are collected by women. It is not clear whether this was the effect of the 2004 tsunami or a trend of increasing deoxygenation in waters during the period just after the monsoons. Environmental activists also claim that higher levels of ferrous matter and other pollutants in the river, such as sewage, affects the life cycle of the molluscs through the year.

Policy measures

According to the local fisherfolk, one of the biggest reasons for the reduction in catch is the operations of trawlers and mini purseiners which come in from Vasco (a fairly prosperous town on the other side of the Zuari river). These vessels regularly violate the Marine Fishing Regulation Act (MFRA) 1980 which reserves the area up to 2.6 nm (5 km) for traditional crafts. Despite this, they come as close as possible to the banks for fishing. They have the technology to locate large shoals of fish and do not care whether they are collecting eggs or young ones. Owners of these large vessels are usually aware that this is going to damage their own business in the long run, but in the absence of policy measures or their strict implementation to preserve

replenish fish stocks, they do not want to be left out. They also have the options of moving to greener/bluer pastures and do not have the stakes in sustainable fishing that the local community has.

After a trawler or purseiner comes into the area, it takes about 10-15 days for the small boats to get a 'normal' catch, which is usually an average of 10 kg. During these 10-15 days they get about 2-3 kg, most of which are the less-prized and cheaper varieties of fish.

The women also say that the big vessels keep an eye on the wholesale market. When they notice a good sale, they identify the village from where the women have come and within a day, several trawlers and mini purseiners come to the area and catch as much as they possibly can.

The Department of Fisheries has a full-fledged modern state-of-the-art control room. One key function is to monitor fishing vessels entering Goa's territorial waters. The Department has also acquired a high-speed patrol vessel to curb illegal activities. Members of these fishing communities regularly contact the control room to inform them whenever there are trawlers or mini purseiners in the area. They even contact the Director of Fisheries on their mobile phones. However, neither the marine police nor the patrol boat, which is under the Department of Fisheries, respond in time. Though it should take about 15 minutes for either of these departments to respond, they take over an hour, giving enough time for the vessels to leave the area. Not that it matters if the latter get caught. The fine for violating the rules is a handsome Rs.100 (about US\$1.5), hardly a deterrent for repeat offences. The mini purseiners earn anywhere between Rs 1-2 lakhs (about US\$1,500 -3,000) per day, while trawlers earn Rs. 20,000 (US\$300) per day.

In response to the communities' demands that strict action against violators be taken, the Department of Fisheries says it cannot increase the fine and there are no notifications to that effect. It is clear that there

is collusion between the large vessel owners and the government departments.

Aqua-sports, particularly aqua-sail boats, have become common in the area over the past two years, mainly with the setting up of a five-star hotel over 28 acres in 2011. The noise and disturbance created by these boats (which come close to the banks) have severely affected the spawning grounds and the amount of fish available. In Nauxi and Bambolim, in particular, there has been a substantial decrease in shevto (mullet), mackerel, sardines, crabs and silverfish. Fishermen had even in previous years protested against aqua-sports in other areas of the state, including in neighbouring communities, but to no avail.

Permission for these boats has been given by three departments-Ports, Tourism and Fisheries. The fishing community spoke to the Fisheries Minister and the Director of the Department of Fisheries regarding their reduced catch due to the sailboats. However, the Department said that it has given permission since these are non-motorized boats and, as such, are unlikely to affect the catch. "Neither of them have any experience with fishing. If they did, they would realize how disturbance in the water affects the fish", says Sanjay Pereira.

The gillnets used by the small-scale fishermen are often damaged by the trawlers or the tourist boats, with no possibility of compensation for the fishermen. The sewage from the hotel is also often released into the river, destroying the fish. This was also brought to the notice of the Department but no action has been taken.

Dwindling Catches

Until about 10 years ago, women used to dry about 25 per cent of the catch. Some of this would be sold, the rest used for domestic consumption, especially in the monsoon period. With the dwindling catches and the reduced space in the community (where some people have sold their lands), women now buy dried fish

from other vendors in the market. This dried fish comes from other parts of the state or the neighbouring state of Karnataka.

Hemmed in and harried as they are by pressures from all sides, the fisherfolk find that the secure rights to their homesteads and continued access to fishing become increasingly irrelevant, with their very livelihoods threatened, their fishing areas exploited by other actors, and their spaces for even minimal expansion limited.

The communities have been trying hard to follow up on promises made and broken, becoming increasingly aware of their rights but not having enough resources against the might of the state and its cronies. Recently, they have sent an appeal to the Governor and the Vice Chancellor of the University asking why three of the temporary posts given to people in their villages and reserved for Scheduled Ttibes were given to people from faraway places in Goa once these posts became permanent.

The reason given to the three candidates was that they lacked experience. The communities demanded to know how these candidates were considered acceptable when the posts temporary. The communities also strongly feel that it is their right to get jobs in the University since it is their lands on which the University has been built and they were promised jobs in the University as a kind of compensation.

Some people from the community of Nauxim have earned large sums of money from the sale of their land to hotels or private owners. However, this was also the result of their tenure rights being of uncertain status unlike in Cacra, resulting in some of them being cheated out of their lands or paid far lower than the market rates. The lack of security of their tenure determine their bargaining capacity. All these people who have sold their lands no longer live in the villages and have moved to other areas. This is a pattern that may be repeated with other members of the community as well.

The 145-acre luxury coastal gated project, which came up instead of residences for which permissions were given is located near the Siridao-Bambolim bay, flouting CRZ and hill-cutting norms. Environmental organizations took the case to court and after seven years of struggle, the court declared some of the constructions illegal and fined the hotel Rs25 lakh. However, the illegal constructions have not been demolished, since the verdict was not specific enough.

The Gaudas have initiated the formation of an association which includes Other Backward Castes (OBCs). The Shri Shanta Durga Fishermen Association was established seven years ago and covers all of Tiswadi taluka. Apart from these five villages, it also includes inland waters in other parts of the taluka. Of the 160 members, 30 are women. The main issues taken up by the association are the problems they face due to the mini purseiners and water sports, and how to address these, and the issues regarding the proposed marinas on the Zuari river, which have been the centre of much controversy in recent years, with the government appearing determined to go ahead despite the opposition.

Livelihood protection

Many in these communities have been forced to look elsewhere for sources of income. Some have got government jobs, some are in the private sector or are self-employed. However, they see this as a lack of choice. The fishing community would want their children to continue in fishing if there is a possibility of conserving and responsibly managing the resource. Their struggle is to ensure that smallscale fisheries are protected and that there are stricter bans on letting other players (large vessels, tourism operations, and so on) into the area thereby affecting their livelihood and the environment. The increase in educational levels of the youth are enabling some of them to get jobs in the private sector. However, due to low salaries, they supplement their income with fishing. The communities fear that if current trends continue with complete disregard for their traditional livelihoods, there will be no option for the coming generation but to look for alternative livelihood sources.

The concerns of the fishing community cannot be seen in isolation from what is going on across the state. The government, irrespective of which party is in power, has been selling land, water and mineral resources to the highest bidder with no thought for the environment or the local people who have lived off, and sustainably managed, these resources. The powerful and wellconnected industrial, hotel real-estate lobbies have the clout to get problems settled in their favour and do not shy away from the use of muscle power as in the famous case of Leading Hotels, which is involved in a very controversial effort to set up a massive golf course in Goa, in the teeth of opposition from locals and environmentalists. In another case, the Supreme Court ordered the demolition of a portion of a five-star resort at Dona Paula. In response, the government passed the Land Acquisition (Goa Amendment) Act, 2009, simply to validate and make legal an extended portion of the construction made by this hotel. The challenge to this amendment was dismissed by the Supreme Court in 2016, with the result that what was declared to be illegal has now become legal, to the immense benefit of the hotel. Ranged against the might of powerful lobbies, communities cannot fight the legal and other battles required to get their rights to prevail.

It is in this context that the fisherfolk are viewing many recent developments with trepidation. For example, the fishermen's organization Goencho Ramponkarancho Ekvott (Unity of Goan Fishermen) or GRE have been protesting the use of high-voltage light-emitting diode (LED) lights and bull trawling off the Goa coast, given that these practices are adversely affecting the livelihood of traditional fishermen. While the former was banned in May 2016 through

a government circular (perhaps to silence the fishermen's protests which have been escalating), it is left to be seen how the ban is implemented.

There are proposals in the pipeline to set up two marinas in Goa ostensibly to boost high-end tourism one in Nauxim, Bambolim and the other in Chicalim, Sancoale. Due to protests by the fishing communities as well as others and the lack of all clearances, these proposals are currently being held at bay. Apart from public protests, joined in by the Environment Minister, gram sabha resolutions have been passed against the marinas. Villagers of Nauxim had opposed the proposal on 5 December 2010 at a gram sabha of Curca-Telaulim-Bambolim panchayat on 30 January 2011. They alleged that the project is like a declaration of war against indigenous peoples and a threat to food security. Despite all the opposition, the Goa Investment Promotion Board has given in-principle approval to these marinas and once other clearances are obtained, it may be just a matter of time before they are launched. these projects succeed getting passed, while they will be advantageous for large fishing vessels, they will completely destroy smallscale fisheries in the state.

It is no wonder that communities of Oxel, Cacra, Nauxim and Bambolim are worried. They have every reason to be. They foresee a time when, deprived of all livelihood options, they may have to sell out and move away, giving up their traditional livelihoods as well as their homes where they have dwelt all their lives-and with no visible viable alternatives in sight. Modernization and development have come at a high cost for these communities, and it is in this context that one needs to view their struggles and demands.

For more

R

crzgoa.org/mom/

Goa Coastal Zone Management Authority

goaprintingpress.gov.in/uploads/ Land%20Acqisition%20GDD%20 Amendment%20Act.pdf

Land Acquisition (Goa Amendment) Act, 2009

fisheries.goa.gov.in/

Directorate of Fisheries, Goa

Moss Gloss

The introduction of sea moss farming into the island nation of St.Kitts and Nevis offers hope for new jobs, alternative livelihoods and food security

> production from marine capture fish species fluctuated over the past decade and a half, the Department of Marine Resources in the island nation of St.Kitts and Nevis became concerned about the sustainability of the livelihoods of fisherfolk. In order to diversify the risks associated with the fluctuation in the catch of marine species, the Department contacted Department of Fisheries in Grenada for assistance with the mariculture of sea moss (Eucheuma cottonii). Grenada is one of the leading countries in the Caribbean region in sea moss propagation.

The origin of the Eucheuma cottonii species is South East Asia. Eucheuma cottonii became commercially viable in the Philippines in 1974. It was then introduced to some South American countries and later to Grenada. Now it has come to St.Kitts and Nevis.

Sea moss is a cash crop that has the potential to create new jobs within developing countries.

In St.Kitts and Nevis, a number of marine sites were identified for sea moss cultivation. A few pilot plots were cultivated as demonstration for fisherfolk. A number of fisherfolk organizations in the Federation of St.Kitts and Nevis have been identified to grow the sea moss while the Department of Marine Resources will be responsible in finding markets for the product when it is converted into sea moss drink.

Sea moss is a cash crop that has the potential to create new jobs within developing countries. It was introduced as a viable means of providing food security and alternative livelihoods in light of unpredictable fish landings affecting fishing communities and threatening their livelihood development.

For more

zizonline.com/sea-moss-cultivation-inst-kitts/

Sea Moss Cultivation in St.Kitts and Nevis

stlucianewsonline.com/sea-moss-farmersto-be-certified-in-sustainable-seamossproduction/

Sea Moss Farmers to be Certified in Sustainable Sea Moss Production

This piece is by **Marc Williams** (marcwill3@aol.com), Director,
Department of Marine Resources, Paul
Southwell Industrial Site, St. Kitts and Nevis

Potential for Transformation

As a country in transition, Myanmar is seeking to unlock the potential of its fisheries and aquaculture sector for inclusive growth, improved livelihoods, and better food security

yanmar is a country in transition, having elected its first civil government in more than 50 years in November 2015. It is now over 200 days since the new government has taken office and the transition away from military rule will not be simple. The country faces many challenges and is one of the poorest and least developed in Southeast Asia. In the fishery sector, these challenges involve balancing the demand for fish in international and domestic markets against declines in fish stocks, increasing fishing pressures and aquatic habitats under risk.

In April 2016, at the Pyin Lwin workshop, Myanmar's leading institutions, researchers and practitioners in fisheries and aquaculture came together with international experts to support the new government in finding the path that would best fulfill the potential of the fisheries and aquaculture sectors. The key resulting message from this workshop is that while there is an enormous potential for fisheries and aquaculture to sustainably and significantly increase their contribution to Myanmar's economy and societal well-being, there is an impending need for transformation in the governance and management of these sectors. These changes are needed to bring about positive and profound impacts on the livelihoods and food security of fishing communities and fishworkers and also to contribute to meeting Myanmar's international commitments to achieving the United Nation Sustainable Development Goals (SDGs).

Myanmar has a population of just over 51 mn of whom 70 per cent

are engaged in agriculture, including fisheries. The fisheries sector, comprising offshore, coastal, inland fisheries and aquaculture, is vital for national food security, income generation and export earnings. Fisheries and aquaculture are an important part of primary production and represented 8 per cent of the country's gross domestic product (GDP) in 2014-2015. During this period, fisheries and aquaculture produced 5.3 mn tonnes of fish and exported over 350,000 tonnes valued at US\$480 mn. In 2014, fisheries directly employed more than 3 mn people and 12 mn people are estimated to

...there is an enormous potential for fisheries and aquaculture to sustainably and significantly increase their contribution to Myanmar's economy and societal well-being...

be indirectly involved in the sector in transporting, trading and processing fish and fish products.

Over 70 per ent of the fish harvested is consumed nationally and it is estimated that an average of 21 kg per person is consumed per year, accounting for almost half the animal-source food consumed and making fish and fish products second only to rice in the national diet.

Fisheries governance

Despite the importance of the fisheries sector to national food security, income generation and export earnings, fishery governance remains weak. A recent analysis of the effectiveness of fisheries governance across 28 countries that represent 80 per cent of the global catch scored

This article is by **Gareth Johnstone** (g.johnstone@cgiar.org), the country manager for WorldFish, Myanmar

GARETH JOHNSTONE



A fisherwoman at Thongwa fish market, Yangon, Myanmar. Fish is an extremely important component of the Myanmar diet, and demand is growing quickly as the country urbanizes and incomes rise

Myanmar is the lowest. Successive governments have failed to recognize the importance of fisheries to the rural economy, and policies and laws remain focused on revenue capture and meeting centrally planned production targets.

Fisheries management is limited by current fisheries policies and suffers from inadequate data, weak institutional capacity and insufficient experience of using science and local knowledge to develop sustainable and responsible fisheries. The government reported increasing fish production from 0.83 mn tonnes in 1994 to 5.05 mn tonnes in 2013-2014, figures centrally reflect planned targets and not actual production, as evidenced from recent stock assessments and consumption surveys. As a consequence, important fishproducing areas (rivers, rice paddies, reservoirs, irrigation canals, wetlands, estuaries, coastal and offshore marine areas) are at risk.

As the country opens up and attracts more domestic and foreign investment, the government and sector stakeholders will need to make decisions about how the fishery sector develops in order to meet growing demands. Myanmar has the 'late-mover advantage' and can benefit from learning from the many lessons of its neighbours and capitalize on and incorporate international experiences and best practices in its planning. Understanding the current status and the key drivers of change for fishery aquaculture resources fundamental in helping the new government, sector stakeholders, businesses and fishing communities make informed choices to sustain and increase the contribution of fisheries and aquaculture to rural development.

The Pyin Oo Lwin workshop brought together fishery managers from the government and researchers and practitioners from universities, private sector and NGOs with international experts to facilitate an assessment and evaluation of the fishery and aquaculture sectors.

Opportunities

The workshop provided a platform for discussion and debate and identified key drivers of change and the opportunities and challenges facing fisheries and aquaculture in Myanmar. The output is a collective analysis and synthesis of the fishery and aquaculture sector using the best available data. The deliberations produced a set of policy briefs outlining possible futures suggested pathways for sustaining increasing the contribution fisheries and aquaculture Myanmar's development. policy briefs were produced for aquaculture, offshore, inshore and freshwater fisheries. Data were also collated to reflect how Myanmar can respond to achieving the SDGs in the fishery sector and how to place the sector in the global context and assist the new government to better understand how fisheries and aquaculture can be optimized in achieving national and international development goals.

Myanmar's offshore fisheries are those beyond 10 nm from the shore to the limit of the exclusive economic zone (EEZ). More than 1.4 mn offshore and inshore fishers registered in Myanmar and offshore fleet is composed of over 2,700 vessels, which is widely considered to exceed the carrying capacity of target stocks. Data from recent ecosystem surveys found that offshore fish stocks have been depleted by up to 80 per cent since 1979, exposing Myanmar's people to significant economic, food security, nutrition and environmental risks. The ecosystem decline has not been aided by outdated and weak laws and policies and by inadequate management and institutional capacity. Accurate or reliable offshore fisheries production statistics do not exist, due to official adjustments made to landings statistics. The official production statistics put the total annual marine harvest at 2.85 mn tonnes during 2014-15, which is likely a gross overestimate of the real landings volume.

In spite of these challenges, Myanmar's fisheries can be rebuilt and long-term economic, social and environmental benefits derived by improving the laws, policies, partnerships, management and institutional capacities. Modernizing the laws can enable fisheries regulation to monitor and sustainably manage Myanmar's stocks. Adopting and implementing the 2016 National Plan of Action (NPOA) to deter, combat and eliminate Illegal. Unreported and Unregulated (IUU) fishing (NPOA-IUU) would ensure the effective implementation of fisheries management, and contribute to securing legal and safe working conditions to minimize existing human-rights transgressions. Under an improved legal framework, stock recovery and increased value capture can be achieved.

Inshore fisheries are those areas less than 10 nm from the shore. Nearly half (48 per cent) of Myanmar's population live in coastal states and regions and the inshore fisheries support the livelihoods of millions of Myanmar citizens who are among the most marginalized, poorest and most vulnerable people in society. Coastal fishers use small-scale gears to target numerous species (fish, molluscs and crustaceans) and women play a vital role in inshore fisheries, particularly in fish processing, with locally

Accurate or reliable offshore fisheries production statistics do not exist, due to official adjustments made to landings statistics.

processed fish products providing a major nutritional component of the Myanmar diet, particularly in upland regions.

Poor policy

In recent years, the capacity of inshore fisheries to support viable livelihoods and contribute significantly to local economies has come under threat. There is an overharvest of stocks combined with insecure tenure and competition. The sustainability of inshore fisheries is threatened by multiple uses and users of the coastal resources. There is inadequate policy recognition of the importance of inshore fisheries and poor policy alignment between Union, state and

Box

Key messages from the Pyin Oo Lwin fisheries workshop

Myanmar's fisheries

- Enormous potential exists to increase fisheries contribution to Myanmar's economy and well-being.
- Transformation can be facilitated through improvements to fisheries legislation, policies, management, knowledge, institutional capacities and partnerships.

Offshore fisheries

- Offshore stocks are depleted and require rebuilding plans.
- Offshore management can be improved through integrated ecosystem-based and spatial planning.
- A National Plan of Action (NPOA) to deter, combat and eliminate IUU fishing needs to be adopted and implemented.

Inshore fisheries

- Coastal communities can be empowered and strengthened through co-management.
- Closer alignment of Union and state/regional agencies and institutions can improve inshore fisheries management and law enforcement.

Freshwater fisheries

Better knowledge about the fishery is needed to ensure its sustainable exploitation.

Integration of agriculture, irrigation and fisheries under a single ministry will
provide the opportunity to address conflicts and help integrate land and water
management.

Aquaculture

- Employment can be generated and rural growth stimulated through a competitive aquaculture sector led by small farmers and small and medium enterprises (SMEs).
- Farmers should be allowed to choose how to use their agricultural land.
- Regulation can be improved, institutional and human capacity strengthened, and infrastructure built.

The Pyin Oo Lwin workshop was funded by the Australian Center for International Agricultural Research (ACIAR) and involved participants from the Myanmar Department of Fisheries (DoF), Myanmar Fishery Federation (MFF), WorldFish, Michigan State University (MSU), World Conservation Society (WCS), University of Arizona, Stockholm Resilience Center, Trade Development Program (EU), Food and Agricultural Organization (UNFAO), Pyoe Pin Program, Network Activities Group (NAG) and CUSO International. The process of developing the policy briefs stimulated the formation of the Myanmar Fisheries Partnership (MFP), a collation of national and international organizations that is supporting the Myanmar government to strengthen effective collaboration for the sustainable development of Myanmar's fisheries and aquaculture sector.

local institutions. To reverse these trends, there is a need to empower and strengthen communities through effective co-management and to harmonize laws and policies that secure the contribution of inshore fisheries to food security development. Fisheries boundaries need to be better defined, particularly as they vary between states and regions and there is need for better fisheries national statistics currently there are no species-specific data collected on catch and effort. These actions should to be aligned with key development principles, including working through partnerships and striving for greater gender equality.

Freshwater fisheries are those in freshwater bodies such rivers, streams, ponds and lakes of permanent or temporary nature. In 2015, Myanmar's freshwater fisheries yielded 1.5 mn tonnes, which represents 28 per cent of the total national fish production and is reportedly the largest freshwater fishery in Southeast Asia. Freshwater fisheries provide employment to 1.5 mn people and 27 per cent of the fresh fish is consumed nationally. There are two management regimes for inland fisheries—(a) leasable fisheries where exclusive exploitation rights of delimited water bodies are auctioned, and (b) open fisheries for which fishing gear licences are issued by the Department of Fisheries. There is growing evidence of a rapid reduction in the catch per fisher (catch per unit effort) and in the abundance of high-value fish species.

freshwater fisheries Myanmar are economically significant and important to livelihoods and food security. There are significant threats to the resource base and increasing domestic demand for fish calls for the development of improved laws, management initiatives and people-centered approaches. These include strengthening the knowledge base of the resource with specific monitoring of target species such as hilsa as current data are not detailed enough to inform management. Improving the existing fish-production systems (open fisheries, leasable fisheries) through co-management and developing new fish-production systems in the irrigation reservoirs. Land-use conflicts between farmers and fishers need to be addressed and can be resolved by optimizing the recent integration of the agriculture, irrigation and fisheries sectors under a single ministry, which can help to integrate land and water management. Improvements to the contribution of fisheries to food

security and livelihoods at the state/regional level is necessary and can be addressed by influencing the emerging new region and state legislation on freshwater fisheries.

In Myanmar aquaculture has been growing quickly at a rate of 9 per cent per year since 2004, and contributes 21 per cent of the fish consumed nationally. Farming fish generates average profits five to ten times higher than rice and other agricultural crops, and more than twice as much employment per acre as paddy farming. Aquaculture is very concentrated geographically, with 90 per cent of inland fish ponds located in the Ayeyarwady Delta, close to the main commercial centre, Yangon. A single species (rohu), accounts for around 70 per cent of the fish produced in Myanmar, with shrimp, a high-value crop grown mainly for export, contributing 5.6 per cent of production, with opportunities for growth.

Fish is an extremely important component of the Myanmar diet, and demand is growing quickly as the country urbanizes and incomes rise. Aquaculture is ideally placed to meet this demand, while also raising farm incomes and creating employment. Myanmar has several policy options that could help to unlock the potential aquaculture's of contributions to rural growth and national food supply. These are: regulatory reforms that allow small farmers to use their agricultural land for aquaculture; improved access to farm inputs and technologies; and greater access to the knowledge and services needed to support sectoral modernization.

The Pyin Oo Lwin workshop and policy briefs can contribute to the national dialogue and strategic development as the Myanmar government shapes a new vision for the fishery sector. The policy briefs provide guidance on the integration of national fisheries obligations into wider regional and international planning processes and frameworks. The SDGs offer a tangible link to global policymaking and provide the international context for evaluating the contribution of Myanmar's fisheries to the national economy and societal well-being. The SDGs help broaden discussions and address questions on the possible futures and suggested pathways for sustaining and increasing fisheries contribution to rural development. The assessment identified a total of 12 out of the 17 SDGs where Myanmar fisheries and aquaculture can directly contribute to achieving these goals.

The political transition period provides a window of opportunity for the government to revitalize the fisheries sector through actions such as restoring fish stocks and habitats, ensuring decent employment and labour conditions, and providing transparency in revenue raising and licensing. Myanmar's government will need to address these multiple challenges and opportunities in collaboration with national and international organizations. Currently, the sector is experiencing a steady growth in development support and is providing excellent opportunities to invest and build partnerships that are targeted at working government fulfill national to international development and goals. Sustained engagement by government agencies is critical to this process and has the potential to transform the sector and to allow the fisheries sector to fully contribute to Myanmar's development.

For more

R

worldfishcenter.org/resource_centre/MFP-01-Overview.pdf worldfishcenter.org/content/myanmarfisheries-overview

Myanmar Fisheries Partnership Policy Briefs – English Versions

worldfishcenter.org/resource_centre/MFP-02-Offshore.pdf worldfishcenter.org/content/myanmar-fisheries-offshore-fisheries

Myanmar Fisheries Partnership. (2016) Myanmar Fisheries: Offshore Fisheries

worldfishcenter.org/resource_centre/MFP-03-Inshore.pdf worldfishcenter.org/content/myanmar-fisheries-inshore-fisheries

Myanmar Fisheries Partnership. (2016) Myanmar Fisheries: Inshore Fisheries

worldfishcenter.org/resource_centre/MFP-04-Freshwater.pdf worldfishcenter.org/content/myanmar-fisheries-freshwater-fisheries

Myanmar Fisheries Partnership. (2016) Myanmar Fisheries: Freshwater Fisheries

worldfishcenter.org/resource_centre/MFP-05-Aquaculture.pdf worldfishcenter.org/content/myanmar-fisheries-aquaculture

Myanmar Fisheries Partnership. (2016) Myanmar Fisheries: Aquaculture

Growing Blue

The 41st IAMSLIC Conference on 'Blue Growth: Motivating Innovations in Aquatic Information Management' stressed the need to select and organize information

ibraries face hard times now that organizations tend to cut their budgets and limit resources which, in the past, would cover the information sections. Can it all be found on the Internet, as some managers seem to think? There might be a growing need to select and organize information. These and other issues were discussed at an international conference organized by the International Association of Aquatic and Marine Science Libraries and Information Centres (IAMSLIC), together with its regional group from Europe, the European Association of Aquatic Sciences Libraries and

groups of IAMSLIC. Other groups of regional collaboration include the North American West Coast and Hawaii (CYAMUS), and the Atlantic and Gulf coasts of North and Central America (SAIL: Southeast Affiliates of IAMSLIC Libraries). Later on, a Latin American and an African regional group were formed.

Organizing international regional conferences are only one of the initiatives related to international co-operation. Resource amongst libraries has been another important focus of IAMSLIC. First of all, there is the 'IAMSLIC Z39.50 Distributed Library', which aims at facilitating resource sharing among participating libraries and brings together 68 different IAMSLIC lending libraries in 26 countries receiving borrowing requests from 96 IAMSLIC libraries in 43 countries.

Under the direction of IAMSLIC, the Aquatic Commons digital repository was developed. Aquatic Commons is a thematic repository and covers the natural, marine, estuarine, brackishwater freshwater environments, including all aspects of the science, technology, management and conservation of these environments. Since 2007, the repository has been growing impressively in coverage and at present contains over 16,000 documents with more than 2 mn downloads.

Resource sharing amongst libraries has been another important focus of IAMSLIC.

Information Centres (EURASLIC), and hosted by the Food and Agriculture Organization of the United Nations (FAO) at its headquarters in Rome, Italy, in September 2015.

The early days of IAMSLIC were in the 1970s, when a group of marine science librarians from the east coast of the United States and Canada met for the first time to discuss issues related to their profession and collaboration between their libraries. Other national groups were also active in European countries, when, in 1988, the Marine and Freshwater Librarians' from the United Kingdom invited professionals and organizations from mainland Europe to join their annual meeting. This was the kickoff meeting of EURASLIC, which soon became one of the first regional

Partnerships

IAMSLIC has partnership agreements with several international organizations, including the Intergovernmental Oceanographic Commission of UNESCO (IOC) and the Food and Agriculture Organization of the United Nations (FAO). It aims at strengthening co-operation with

This article is by **Armand Gribling** (armand.gribling@gmail.com),
David Lubin Memorial Library (retired), FAO,
Rome, Italy and **Maria Kalentsits** (maria.
kalentsits@fao.org), Consultant, ASFA
Secretariat, FAO, Rome, Italy

these organizations in the field of information management through providing training, promoting networking of librarians and other information managers, and assisting aquatic libraries to disseminate and provide access to relevant materials.

Under the Memorandum of Understanding between IAMSLIC and FAO, the IAMSLIC Conference of 2005 was held at FAO's headquarters in Rome, Italy. Ten years later, IAMSLIC and its regional group from Europe organized their joint conference, again in Rome. As the conference was hosted by FAO, the theme was related to the work of the organization: 'Blue Growth: Motivating Innovations in Aquatic Information Management'.

In short, Blue Growth is an FAO initiative to address sustainability in food from the oceans. The initiative addresses environmental and socioeconomic considerations related to four areas—capture fisheries, aquaculture, processing, and cultural importance. Blue Growth focuses on food security, poverty alleviation and the sustainable management of aquatic resources. As Arni Mathiesen, Director-General Assistant FAO's Fisheries and Aquaculture Department, stated in his opening librarians and speech, information specialists have a key role as knowledge facilitators in promoting Blue Growth.

Devin Bartley, keynote speaker from the FAO, highlighted, in his presentation, the complex information needs for fisheries to grow blue, including the necessity to pay more attention to freshwater ecosystems and inland fisheries.

A special session on Blue Growth and other FAO initiatives included several presentations by other invited speakers. Lahsen Ababouch, Director of the Fisheries Policy and Economics Division of the FAO's Fisheries and Aquaculture Department, and Marc Taconet, Chief of Fisheries Statistics and Information Branch, FAO-FI, provided an introductory presentation on the FAO Blue Growth Initiative (BGI) and information needs in support of it. In order to address increasingly complex information

needs and to deal with growing information generation, the Global Data Framework for Blue Growth has been proposed as FAO's response. A framework will connect existing sources of knowledge such as statistics, databases, websites and publications, and maintain linkages across information domains from the national to the global scale.

A key role for librarians in BGI is presented in three main components: (i) data sets Metadata which includes research on proper data sets citations, connection with established Metadata standards, promotion and generation of business Metadata for datasets: (ii) accessibility to grey literature, for example, through further development of the Aquatic Commons; and (iii) development of the semantic web, for example, by publishing thesaurus as Linked Open Data and through developing mappings among thesaurus.

presentation by Suzuette Soomai from Dalhousie University, Canada, focused on the critical role of marine information use at the science-policy interface. According to the author, the major barriers in the information use are dispersed organizational structures, asynchronous national policy and science, and the situation where national decisionmakers are not pressured by managers to address complex issues, austerity measures as well as scientific uncertainty. The author's conclusion is that the global Blue Growth agenda can be advanced by FAO acting as a boundary organization and, secondly, by welldefined processes for producing information and decisionmaking at the national and regional fisheries management levels.

Management practices

Uwe Barg of FAO presented a project aimed at providing access to Codes of Practice (COP) and Better Management Practices (BMP) documents in aquaculture. Alessia Bardi from the Italian National Research Council (CNR) made a presentation on providing access, monitoring and contextualising

Open Access publications. SciRepo publishing model benefits were discussed and the iMarine Research Infrastructure was mentioned as an example which features part of the SciRepo social functionalities.

Besides the official programme, with excellent and often inspiring presentations, formal and informal networking was crucial for a conference that brought together over 70 participants from 33 countries. Though the majority came from Europe and North America, there was good participation from Africa, Asia, the Pacific and Latin America. Thanks to the collaboration with FAO's Fisheries and Aquaculture Department and FAO's projects, funding or partial funding was provided for a total of 15 participants, while the international co-operative information system, Aquatic Sciences Fisheries Abstracts (ASFA), funded another four participants from Africa and Eastern Europe (Tunisia, Senegal, Estonia Bulgaria). Furthermore, IAMSLIC itself has a solidarity fund with which they contribute to the expenses of several participants and sponsorship from scientific publishers also added to this fund.

Eight participants from Asian and Pacific aquatic libraries in Bangladesh, China, Fiji, India, Philippines and Vietnam attended the conference. A special section was dedicated to Asian libraries and information centres. Stephen Alayon, from Southeast Asian Fisheries Development Center (SEAFDEC), based in the Philippines, presented a survey of the information resources and dissemination programs in Asia. Several institutions in Asia have initiated various programmes and services in organizing and disseminating aquatic and marine information and statistics. Alayon presented an initial inventory of information sources and networks, libraries and other information centres, institutional repositories and other information programmes.

Samuela Nakalevu from the Secretariat of the Pacific Community (SPC), based in Suva, Fiji, presented a paper, prepared with other colleagues, on relevant digital repositories in Asia and the Pacific and the importance of the quality of the so-called metadata, which enable discovery, access and sharing of these digital collections available on the Internet.

Venugopalan of the International Collective in Support of Fishworkers (ICSF), India, spoke on '25 Years of Connecting with Fishing Communities for a Sustainable Future'. ICSF has substantially contributed to empowerment of fishing communities. presentation examined information management activity of ICSF in its work to support the human rights of fishing communities and fishworkers worldwide. It described the ways that ICSF's various activities have raised awareness of the social components of fisheries and the marine environment among fishworker organizations, policymakers, multilateral agencies, research institutions, NGOs others. Through intense interactive workshops, field visits, publications, films, and CD-ROMs, information management has moved to new platforms of immediate accessibility to all.

Through the worldwide web, ICSF created new ways of thinking about storage and distribution of information and access. Through the introduction of new e-reading services, it created new forms of negotiating and navigating. Through interactive training programmes and films, it promoted innovation in information/knowledge management as a creative process to respond coherently and effectively to the requirements of fishing communities.

Public opinion

Drawing on examples from the work of ICSF in different continents for over 25 years and experiences from different aquatic environments, the presentation looked at how ICSF has worked to create informed public opinion and enhanced visibility to empower fishing communities to improve their situations, despite their unequal access to technology, low

bandwidth, and the unequal levels of skills. The challenge is to make it easier for fishing communities and fishworker organizations to find tools that they can use and adapt to their own specific areas of work. Library networks like IAMSLIC can help by sharing costly information resources and multiplying channels of information and exchange to create better and more sustainable access to information for those to whom this is not easily available.

Daryl Superio, from SEAFDEC, presented a survey on the informationseeking behaviour of milkfish farmers and their awareness of the Philippines Code of Practice for Aquaculture. The study, among milkfish farmers in Dumangas and Leganes, Iloilo, Philippines, focused on their information needs; preferred medium in searching for information and preferred sources of information in relation to water discharge and sludge/effluent management; of drugs, chemicals, potentially toxic pesticides and fertilizers; stock selection, stocking practices; feed use and management; and fishhealth management as promulgated in the Philippines Code of Practice for Aquaculture.

Lyra Joyce N Pagulayan from the FishBase and Information and Research Group, Inc (FIN) made an inspiring presentation, prepared in co-authorship with Nicolas Bailly and Maria Lourdes Palomares (both from FishBase), on building an e-library for aquatic biodiversity services in Philippines. The proposed FIN e-library will allow searching publications by geographic administrative areas via a Geographic Information System (GIS) man interface which will facilitate visual retrieval of publications based on geographical locality and thus will increase awareness aquatic biodiversity and, in particular, freshwater biodiversity not only for Philippine users but also for the international community.

Rizia Begum, Senior Librarian from the Bangladesh Fisheries Research Institute (BFRI), presented an overview of the users of fisheries information in Bangladesh as well as of collections and services provided by the BFRI Library and Documentation Centre (FRILDOC). She stressed the importance of the Aquatic Commons Digital Repository for stakeholders in Bangladesh which, among many other valuable publications, provides full-text access to the *Bangladesh Journal of Fisheries Research*, published by BFRI.

Ningsheng Yang from the Chinese Academy of Fisheries Sciences (CAFS) presented a series of posters introducing information management at CAFS. Special attention was paid to brief descriptions of the information systems established such as the National Infrastructure of Fishery Germ Plasm Resources, the Information Network of Seafood Culture Industry, the Freshwater Fish Breeding Platform, Production Management Information System, Fishery Scientific Data Platform, Fishing Vessel ASF System, Inland Fishing Vessel Information Management System, Aquaculture Disease Diagnosis System and Aquaculture Product Safety Monitoring System.

A poster by Dang Thi Hai Yen from the Viet Nam Institute of Oceanography (VNIO) highlighted the role of FAO fisheries publications in support of the research activities. As was stated in the poster, between 1978 and 2014, FAO has supported 400 projects on sustainable agricultural development, food security and nutrition, forestry and fisheries in Vietnam.

The kick-off meeting was held to discuss the establishment of the IAMSLIC Regional Group in Asia. The participants agreed that awareness regarding IAMSLIC needs to be raised amongst librarians and information specialists before an Asian regional group may be established.

All the conference presentations are available at the Aquatic Commons Digital Repository at http://aquaticcommons.org/

For more

aquaticcommons.org

Aquatic Commons Digital Repository

iamslic.org/

The International Association of Aquatic and Marine Science Libraries and Information Centers

Caught in a Net

Small-scale fishing communities in South Africa have to cope with unequal power relations as they seek effective means for the implementation of the SSF Guidelines

n July 2014 the International Collective Support of Fishworkers (ICSF) hosted international workshop implementation of the Voluntary Guidelines for Sustainable Smallscale Fisheries (VG SSF), entitled "Towards Socially Just and Sustainable Fisheries: **ICSF** Workshop Implementing the FAO Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)".

Participants at the workshop recognized that power relations within which SSF communities implementation action plan can be built, ICSF has embarked on a number of national studies in order to promote deeper understanding of the social relations shaping small-scale fisheries (SSF) in different contexts. In 2015 a study of the dynamics and social relations impacting SSF in South Africa was undertaken. This was complemented with an analysis of the existing legislative and policy environment in South Africa within which the SSF Guidelines will gain traction.

of information upon which the

foundation of the SSF Guidelines

Since its first democratic elections in 1994, South Africa has developed an extensive legislative and policy framework that gives the SSF Guidelines traction within the constitutional framework which fisheries governance marine resource conservation located in this country. An analysis of the key principles and provisions in the SSF Guidelines provides clear evidence that implementation of the SSF Guidelines in South Africa is not an optional, voluntary gesture of goodwill on the part of either the South African government or of any other actor in the fisheries sector. Rather, the SSF Guidelines conveniently bring together a range human-rights of pre-existing obligations and policy guidelines that have relevance for the SSF subsector.

...the SSF Guidelines conveniently bring together a range of pre-existing human-rights obligations and policy guidelines that have relevance for the SSF subsector.

> are located are invariably skewed against these communities and, in particular, against women and other vulnerable and marginalized groups. Integral to the SSF Guidelines' goal of targeting the most vulnerable and marginalized persons and eliminating discrimination will be the need to adequate understanding of have relations these power and intersectionalities that shape access to, and control over, marine and other resources. These intersectionalities include issues such as gender, race, ethnicity, age, labour and migratory status, disability and geographic location, amongst other historical and specific power relations relevant in each national context.

In order to contribute towards the development of a sound body

Ecosystem approach

From provisions to secure gender equity for women in fisheries and eliminate all forms of discrimination to secure decent and fair labour standards to the need to adopt an ecosystem approach to fisheries, the SSF Guidelines are mirrored

This article is by **Jackie Sunde** (jsunde@telkomsa.net), Member, ICSF

in national legislation and policy even though this framework was developed prior to the SSF Guidelines. The only significant gap in this national framework relates to specific provisions to protect the rights of indigenous peoples and migrant fishers. These groups may vulnerable. Although the Equality Clause of the Constitution outlaws discrimination, and most indigenous peoples would be protected by various clauses in the Constitution, the specific rights and needs of indigenous peoples have not been highlighted and South Africa has failed to implement the 2007 UN Declaration on the Rights of Indigenous Peoples.

However, the South African Constitution obliges the State to take cognisance of international law and as the rights of indigenous peoples are now international customary law, this would apply. In addition, although the Constitution recognizes the rights and freedoms of all people in the country, even if they are foreign nationals, there are no specific mechanisms to ensure the protection of migrant fishers. Migrant fishers, particularly if they are found to be in South African waters illegally, might be very vulnerable as the Constitutional provision protecting all people in the country is dependent on being legally resident in the country. Over and above the two gaps mentioned, the spirit of the SSF Guidelines is clearly evidenced in South Africa's national legislation and policy developed on the foundation of the human rights enshrined in the country's Constitution.

Notwithstanding this verv enabling legislative and policy framework in South Africa, interviews with key respondents drawn from SSF fishing communities, fisher leaders, government, NGOs and research institutions, together with a review of current literature, provide evidence that there are huge challenges facing the SSF subsector in South Africa. In particular, a range of unequal power dynamics and social relations shapes the location of small-scale fishers within the political economy

of fisheries and impacts the way in which both the international SSF Guidelines and the recently promulgated South African Policy on Small-scale Fisheries (SSF Policy) are being interpreted and implemented.

Racial, class and gender-based relations, coupled with historical rural-urban divides, continue to shape the experiences of different groups of small-scale fishers and their communities. Many fishers up and down the coast express a sense of despair in the face of what appears to be deepening levels of inequity and marginalization within the fisheries sector, with the associated social vulnerabilities that accompany this: high levels of poverty, debt, corruption, food insecurity, sexual violence, drug and alcohol addiction, crime, conflict and depression. Environmental changes in the marine and coastal environment exacerbate

vulnerability their these political and social challenges. While the problems that are cited by the fishers on the western seaboard differ from those in the two coastal provinces on the eastern seaboard, a common theme expressed by fishers, NGO activists and researchers is a perception of growing gap between the visionary and aspirational human-rights-based content of the South African Constitution and the reality that they face on the ground every day.

The industrial fisheries subsector has historically dominated catching, processing and marketing of all high-value species in South Africa. Under the apartheid regime, in Eastern Cape, South Africa



A woman inter-tidal mussel harvester, Dwesa Cwebe,

controlled by white capital. Artisanal and subsistence fishers, predominantly from black communities, were systemically marginalized and dispossessed of their tenure rights to marine resources. SSF communities question the lack of real redress for the racially-based dispossession that many of them experienced during apartheid. Notwithstanding some policy attempts to transform the unequal racial structure of the industry in the past two decades, the continued close relationship between the ruling party, the fisheries administration and the captains of industry creates the co-management conditions required by the industrial subsector to ensure that they benefit from any policy that is introduced to address the needs of the SSF. Their continued control over the means of production, made possible through the failure of the Department of Agriculture, Forestry and Fisheries (DAFF) to apportion adequate resource access to the SSF and to introduce mechanisms to enable SSF

continue to influence how men in fisher organizations and communities perceive women's rights to resources and to controlling these resources. This impacts women most heavily along the western seaboard where the high-value industrial fisheries have been dominated by men. largely Women were restricted to employment in the processing subsector. In the current processes aimed at implementing the SSF Policy, women are required to demonstrate ten years of active involvement in the industry in order to be eligible for membership of an SSF entity with a fishing right. However, their years of employment in the processing establishments are not considered relevant. This is an issue that women fishers are determined to challenge in the coming months, drawing on the Constitution and the SSF Guidelines.

historical marginalization black fishing communities, particularly in two of the coastal provinces of the country, namely the Eastern Cape and KwaZulu Natal provinces, the apartheid where regime established designated areas where African persons could reside, continues to shape the current context. SSF fishing communities in these provinces remain ultra-vulnerable due to their lack of voice and the unequal provision of services in these regions.

...the SSF subsector is structured by patriarchal gender relations which continue to shape the underlying dynamics in communities.

communities to control a segment of the value chain, leaves the SSF very vulnerable. It would appear that notwithstanding State commitments to the SSF Guidelines and the SSF Policy, and hopes for a paradigm shift in favour of a different model of fisheries exploitation that would enable redistribution of marine resources to poor SSF communities, the policy trajectory for the future is 'business as usual' in South Africa.

In addition to key class and racial fissures, the SSF subsector is structured by patriarchal gender relations which continue to shape the underlying dynamics in communities. Whilst superficially an impression of shift is created by the visibility of a few prominent women leaders, deep-seated patriarchal relations

Dispossession

During the height of apartheid, the State embarked on raciallybased spatial planning which dovetailed with the expansion of the conservation estate. More than half of the existing 22 coastal Marine Areas Protected (MPAs) established adjacent to terrestrial reserves that involved racially-based forced removals of local coastal communities. Despite most of these communities submitting land claims in terms of the Land Restitution Act post-apartheid, there has been no recognition of their dispossession from their traditional fishing grounds and marine resources. Land claim settlements have failed to lead to their pre-existing restitution of

tenure and access rights. The heavyhanded attitude of the conservation authorities in these provinces towards the small-scale fishers who they do not accept as having legitimate tenure rights now exacerbates their socioeconomic marginalization.

Communities living in, or adjacent to, MPAs and the iSimangaliso World Heritage Site are most vulnerable in this regard. Lack of high-level inter-sectoral policy cohesion and a total absence of policy guiding the management approach to SSF fisheries in these areas is resulting in extensive conflict between the fishing communities and the authorities. Several local fishing communities living adjacent to MPAs have legal action against the State pending in order to secure their customary tenure rights. The fishers have drawn on the SSF Guidelines and the Voluntary the Responsible Guidelines on Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) in their court papers.

In the light of the fact that South Africa already has a legislative and policy framework that prescribes the implementation of the principles inherent in the SSF Guidelines, the question as to why there is such a gap between the provisions in the SSF Guidelines (and the Constitution and the SSF Policy), and the actual de facto rights enjoyed by SSF fishers on the ground arises. It is apparent that whilst there are de jure provisions to protect and promote the SSF subsector, the interpretation of these legal and policy provisions into practice results in de facto discrimination against poor SSF fishing communities. Several characteristics of the current situation enable this failure to implement the SSF Guidelines.

A powerful neoliberal economic agenda influences the location of the SSF subsector in the political economy of the country and shapes the perceived value and role of the SSF subsector. The industrial subsector commands considerable control over fisheries policy and influences the States' approach to tenure rights,

resource management, marketing and trade, and research support to the sector. The lack of data and information about the SSF subsector is an outcome of this marginalization and further deepens the marginalization of SSF communities.

As one of the consequences of this agenda, organization of fishing communities and fishworkers is fragmented and there is a lack of solidarity amongst actors in the SSF subsector. Small-scale fishers have historically lacked political awareness and voice. They have also been slow

A powerful neoliberal economic agenda influences the location of the SSF subsector in the political economy of the country...

to build community support for their struggles and so fisher organization in many coastal communities is limited, resting largely on a thin layer of fisher leaders with few crosssectoral alliances and little solidarity from other small-scale producers or political groupings. Although one of the key SSF groupings has been very involved in the international advocacy activities leading to the negotiation of the SSF Guidelines, the majority of the SSF subsector lacks awareness of the SSF Guidelines and the protective provisions within both the Constitution and the Guidelines that they could use to defend their rights.

Democratic practice

A major contributing factor has been the government's failure to put mechanisms in place to ensure transparency and accountability within the fisheries administration. This has created a culture in which corruption, cronyism and political influence has thrived. This lack of ethical governance is mirrored in some of the fisher organizations, where a lack of democratic practice and sound checks and balances have enabled several individual leaders to become involved in deals with marketers and the industrial subsector

32

JACKIE SUNDE



Local fishers at Dwesa Cwebe MPA. Artisanal and subsistence fishers, predominantly from black communities, were systemically marginalized and dispossessed of their tenure rights to marine resources

that compromise their legitimacy. In this environment, the lack of legitimacy of both government and community-level institutions has enabled a pervasive perception of lawlessness and inequity.

The analysis conducted by ICSF on the SSF subsector in South Africa provides useful insights into the key obstacles that prevent full and effective implementation of the SSF Guidelines. It suggests that an enabling legislative and framework is a necessary precondition for implementation of the SSF Guidelines but in and of itself is not sufficient to secure their realization. Rather, a multi-pronged approach that builds local-level organization and democracy, advocacy capacity and political power is key to ensuring that the SSF Guidelines are implemented. The SSF Guidelines will be achieved through the bottomup advocacy struggles and strategies of small-scale fishers and their supporters and through them leading by example.

Whilst there are no government or civil-society initiatives to track implementation of the SSF Guidelines in South Africa underway as yet, this research has highlighted the importance of contextual analysis prior to the implementation of the SSF Guidelines. If goals such as promoting eradication and security, eliminating discrimination and ensuring inclusivity and equity are to be achieved, then it becomes necessary to ensure that a baseline understanding of the social relations and dynamics in the fisheries sector is available and that strategic priorities are identified accordingly across all actors, both state and civil society. This study underscores the need to ensure that unequal power relations are placed centre stage in any plan of action in order to ensure that the human rights and freedoms of small-scale fishing communities are realized.

For more

K

icsf.net/en/monographs/article/EN/150-social-relation.html?limitstart=0

Social Relations and Dynamics Shaping the Implementation of the Voluntary Guidelines on Small-scale Fisheries (SSF Guidelines) in South Africa

A Guide to Stand By

The People's Manual on the Guidelines on Governance of Land, Fisheries and Forests is a useful tool for civil society organizations

The crucial role of civil society organizations (CSOs) in the implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (henceforth "the Guidelines") is the first global exhaustive tool on the tenure of natural resources developed through an inclusive process.

This process involved a series of consultations and negotiations at different levels, with the full and effective participation of a vast array of relevant actors, among which was the International Planning Committee for Food Sovereignty (IPC). Through the civil society mechanism (CSM), this autonomous and self-organized global platform brought forward the points of view, experiences, voices and proposals of more than 800 international, regional and national organizations of small-scale food producers and rural workers, and grassroot social movements, men and women.

When the Guidelines were endorsed by the reformed United Nations Committee on World Security (CFS)—the Food main international and intergovernmental platform dealing with food security and nutrition-in May 2012, the IPC celebrated the achievement of this milestone consensus. In fact, with a holistic and participatory approach and the recognition of legitimate tenure rights, including customary, collective, informal tenure rights and the rights of indigenous peoples, among others, the Guidelines should serve as a reference and provide guidance to improve the governance of tenure of land, fisheries and forests. Firmly grounded in human rights

and calling for their respect when addressing tenure issues, and seeking to improve gender equality among all actors, they are key to improving the lives of millions of people all over the world.

The Guidelines are a point of departure, not one of arrival, and their promotion and implementation relies on concerted action by all actors. Whilst governments hold primary responsibility, the proactive support of other actors is key to ensure a significantly positive impact in the field. In this sense, CSOs, and especially those who are most

...the Guidelines should serve as a reference and provide guidance to improve the governance of tenure of land, fisheries and forests.

affected by hunger and malnutrition, those who are marginalized and those who are excluded from land, and the small-scale producers who are the major investors in food security and nutrition and produce more than 80 per cent of the world's food and who advocate for food sovereignty, have a crucial role to play.

Dialogue

These actors and can, participate actively in different kinds of activities and in every stage of the implementation of the Guidelines, from raising awareness and capacity building, to starting a dialogue with other actors, policymaking for the management of national resources and evaluation or conflicts resolution. They are also an essential protagonist in monitoring

This article has been prepared by the Land and Territory Working Group of the International Planning Committee for Food Sovereignty (IPC),
Philip Seufert (Seufert@fian.org)

implementation of the Guidelines and their impact in their territories.

In order to allow these key actors to take ownership of the Guidelines and be the front-and-centre in the different processes, the IPC identified the central need to make the highly technical contents of that instrument accessible and understandable for all, by translating the language of the Guidelines into theirs, and adapting them to the reality on the ground. Thus, as one of the first steps forward the implementation of the Guidelines, the Land and Territory Working Group of the IPC elaborated the People's Manual on the Guidelines on Governance of Land, Fisheries and Forests: A guide for promotion, implementation, monitoring evaluation, issued in June 2016.

This pedagogical and didactic guide is the result of a collective and participatory effort, by and for CSOs, to disseminate and raise awareness on the contents of the Guidelines and translate their principles into concrete action at the field level.

This pedagogical and didactic guide is the result of a collective and participatory effort, by and for CSOs, to disseminate and raise awareness on the contents of the Guidelines...

It aims to provide practical guidance to peasant, fishing and pastoralist organizations, indigenous peoples, the landless, women and youth, and civil society as a whole, to understand and use the Guidelines in their struggles.

The content of this manual is organized in three chapters. The first one summarizes the debates and process that led to the Guidelines, and offers an overview of its history and context while recognizing the need for a framework for the governance of tenure of land, fisheries and forests. In addition, it answers questions such as "Are the Guidelines voluntary or binding?", "What do the Guidelines cover?" and "What link can we draw between the Guidelines, human rights and the

eradication of hunger?". Finally, it addresses the role of state and non-state actors, including CSOs and business enterprises, in governance of tenure.

The second chapter gives a brief but representative overview of nine conflict situations or cases. They do not refer to a specific country or case, but are based on a synthesis of different real-life situations that repeatedly occur in different regions constituencies across planet. These cases present different interacting actors, different types and elements of conflict, as well as sociopolitical features of different territories. Each community or CSO using the manual should be able to find similarities with the reality experienced in their territory, and thus come up with their own assessment of the tenure governance issues they face by using the Guidelines. The User Guide provided in the Manual, which systematises the Guidelines' paragraphs according to different topics of interest to civil society, facilitates the analysis of these situations by relating them directly to the content of the Guidelines. The best way to approach and take ownership of this User Guide and, through it, of the Guidelines, is through practice.

Lastly, the third chapter presents a practical guide on how to implement the Guidelines by providing different tools and strategies. The examples developed in this chapter are mostly based on experiences from different organizations and communities. They are not meant to be prescriptive, but rather to spark questions and generate concrete proposals by including the Guidelines into our struggles, according to the realities on the ground in different places.

Translations

At the moment, the manual is available in five languages: Spanish, English, French, Brazilian Portuguese and Arabic. Many CSOs and those who have already started training and working with the Manual have identified the need to have it translated into different local languages, in order to ensure a broader

WWW.FOODSOVEREIGNTY.ORG

People's Manual on the Guidelines on Governance of Land, Fisheries and Forests

A guide for promotion, implementation, monitoring and evaluation



dissemination and understanding of this tool and, through it, of the Guidelines. We strongly encourage them to do so, and other actors to support this initiative.

Based on a popular education approach and on the realities and experiences of local communities and CSOs, the People's Manual has been also designed as a training tool on the content and relevance of the Guidelines for civil society and organizations grassroots and communities. It has already been used in raising awareness and capacity-building activities in over 20 countries around the world, with the participation of representatives of different constituencies.

By helping people understand the critical relevance of the Guidelines for their livelihoods and for asserting their legitimate tenure rights through these workshops, the Manual has also been a source of inspiration for

the elaboration of concrete strategies based on that instrument.

This manual is a starting point, to trigger a multiplier effect in people taking ownership of the Guidelines, generating dialogue and debate among different population groups and governments and demanding its implementation and compliance in the governance of tenure and the respect of human rights. Increasing numbers of CSOs are committed to their implementation, and have launched powerful initiatives to raise awareness and defend people's tenure rights in all continents. The work on the ground will continue, as will the struggles of our peoples. \$

For more

R

foodsovereignty.org/peoplesmanual/

The People's Manual on the Guidelines on Governance of Land, Fisheries and Forests: A Guide for Promotion, Implemantation, Monitoring and Evaluation

fao.org/nr/tenure/voluntary-guidelines/en/

Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT)

A Plan of Action

A regional workshop on securing sustainable small-scale fisheries in the Lower Mekong Region, held in Thailand, identified issue and action points that need to be addressed

> participants-women representing communities, civil society organizations (CSOs) and governments in the Mekong region (Cambodia, Laos, Vietnam, Thailand Myanmar)—along and with 17 representatives from regional international organizations participated in the Regional Workshop on Securing Sustainable Small-scale Fisheries in the Lower Mekong Region from 30 April to 1 May 2016.

The Mekong River yields about 4 mn tonnes of fish, which includes large and small fish, and fish that migrates upstream from the sea to spawn.

They identified the following issues of concern to small-scale fishing communities in the region and proposed action points for the consideration of relevant government departments, regional bodies such as the Southeast Asian Fisheries Development Centre (SEAFDEC), other relevant national, bilateral and multilateral bodies and civil society, as appropriate.

The Mekong River yields about 4 mn tonnes of fish, which includes large and small fish, and fish that migrates upstream from the sea to spawn. This estimate goes up to 8 mn tonnes if all Mekong wetland fish production is taken into account. The entire fisheries in the Mekong River can be termed small-scale. The river—second only to the Amazon in terms of biodiversity—is home to many endemic species. Thirty-two of these species are on the IUCN Red List. The riparian

areas support a matching ethnic and linguistic diversity that are also endemic. There are millions of women and men fishers, farmers and ethnic communities dependent on the water resources of this ecosystem for their life and livelihood. Many of them alternate between fishing and farming and many fishers are also farmers in the region. A vibrant domestic economy is dependent on small-scale agriculture and the fisheries practices of these communities in the region.

There are several issues facing both the inland and marine fishing communities in the context of the Mekong river basin ecosystem that violate rights guaranteed in the International Covenant on Economic, Social and Cultural Rights (ICESCR). Under the ASEAN Comprehensive Investment Agreement (ACIA) and Greater Mekong Sub-region Economic Co-operation Program (GMS), huge investments are made in the region in extractive and industrial projects as well as in tourism. Various development projects on Mekong and its tributaries, particularly a large number of upstream hydroelectric projects, are negatively impacting downstream aquatic biodiversity, the life cycle of fish, feeding and nursery areas, water quality and the river basin ecosystem (comprising rivers, floodplains, lakes, coastal mangroves, ponds, coastal lagoons, etc.).

Salinity

While there is significant reduction in river flow downstream, there is an alarming increase in salinity intrusion—attributed to climate change/variability—into freshwater fish and agriculture farms, affecting farm output and fisheries.

This statement is from the Workshop on 'Securing Small-scale Fisheries in Asian Region: SSF Guidelines in Action', from April 30- May 1, 2016, in Bangkok, Thailand

There is poor information available to the downstream riparian communities about these projects and their impacts. There are cumulative impacts as a result that threaten the lives and livelihoods of fishers. reducing their access to fisheries resources and violating the customary rights of indigenous peoples. They are often forced out of their homes and traditional occupations. Space needs to be created to back up local people and to empower them. Farmers, fishers and the indigenous peoples need to collaborate to protect the river basin ecosystem.

The Mekong River is shared between six countries. A regional framework for co-operation is the required between riparian States, particularly the downstream countries, towards addressing the above issues at the regional, national and local levels. The 1997 United Nations Convention on the Law of Non-Navigational Uses International Watercourses (UNWC) may be relevant as a regional legal framework also to look at transboundary issues related Vietnam has ratified Convention and Thailand is considering the same.

In coastal areas, the displacement of small-scale fishing communities due to the construction of deep-sea fishing ports and coal-fired power plants and the practice of destructive bottom trawling are threats facing small-scale marine fishing communities. These are further exacerbated by insecure tenure rights to housing of small-scale fishing communities. The consent of communities is rarely sought while bringing infrastructure projects to the region.

Although nearly 50 per cent of people working in small-scale fisheries are women, their role in the sector is still severely underacknowledged. Inequalities persist which hamper the full realization of human rights and sustainable development. Women are underrepresented when it comes to decisionmaking and leadership roles even within fisherpeoples' organizations.

The importance of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) for both inland and marine small-scale fisheries in the Lower Mekong River Basin countries is recognized in the above background to:

- to bring about better governance reforms in relation to small-scale marine and inland fisheries, especially to facilitate unhindered and equitable access to fisheries resources for small-scale fishing communities;
- ii. eradicate hunger and poverty;
- iii. invest in social development and decent work;



Women and men representing fishing communities, civil society organizations (CSOs) and governments in the Mekong region participated in the Regional Workshop on Securing Sustainable Small-scale Fisheries in the Lower Mekong Region from 30 April to 1 May 2016

- iv. adopt measures for long-term conservation and sustainable use of fisheries resources;
- v. promote alternative livelihoods;
- vi. protect tenure rights to land and water; and
- vii. valorise domestic economies dependent on small-scale farming and fishing operations within and outside the region.

The SSF Guidelines can assist in setting priorities in sustainable and responsible use of fisheries as well as strengthen initiatives to set principles and standards for regulating activities impacting small-scale fishing communities in the river basin ecosystem.

The implementation of the SSF Guidelines at the regional, national and local levels demands the involvement of all stakeholders, including the government and civil society. There are enabling factors in both inland and marine fisheries. Countries like Vietnam are paying greater attention to inland fisheries issues now and the SSF Guidelines can be a tool to assist this process. In marine fisheries, countries like Thailand are raising the minimum age for fishing; introducing co-management; and are memorandums of understanding to hire migrant workers into fishing.

A legal foundation should be laid for supporting the implementation of the SSF Guidelines, especially based on a human-rights-based approach, an ecosystem approach and a gender-sensitive approach. National Constitutions provide the human-rights framework towards implementation.

legislation **Policies** and for mainstreaming implementation of the SSF Guidelines should not only be technical, but local culture, customary rights and traditions are also to be factored in. Both horizontal and vertical dimensions of implementation thus should be considered in an integrated and holistic manner. Both the government and the community should collaborate in implementation also by empowering local communities.

Full and effective participation of women should be ensured in this process. All forms of support, including financial support, should be mobilized for the implementation of the SSF Guidelines.

The following actions points within the framework of the SSF Guidelines are addressed to both the State and civil society actors towards redefining the development paradigm in the Lower Mekong River Basin to promote sustainable and equitable marine and inland fisheries in the region, and to protect small-scale fishers, farmers and indigenous peoples from infrastructure and industrial projects that negatively impact their access to land, fisheries and markets.

Governance of tenure in small-scale fisheries and resource management

- Develop laws and regulations applying a human-rights-based approach, an ecosystem approach and a gender-sensitive approach.
- Secure the rights of fishing communities to land for decent housing and for fishery-related activities, particularly in areas where their access is most threatened. The specific needs of women harvesters and fish processors for access to land for fishery-related activities should be prioritized..
- Improve current arrangements for access to land and fishery resources for small-scale fisheries, both marine and inland.
- Review existing tenure rights systems for fisheries and land to protect small-scale fisheries.
- Ensure equitable participation of small-scale fisheries in co-management and other initiatives and frameworks.

Social development

- Empower small-scale fishing communities through an integrated ecosystem/holistic approach for small-scale fisheries development. Establish a national platform representing all stakeholders to support the implementation of the SSF Guidelines in a participatory manner.
- Address issues related to transborder movement of workers

- to support an environment for small-scale fisheries communities to enjoy decent work.
- Promote investment in human resource development such as education, health, basic sanitation and drinking water. Enable access to education and health facilities, including medical insurance that meet the needs of small-scale fishing communities, and ensure access of women to such services. In this context, consider learning from the best practices in the region.
- Strengthen capacity building of women and youth.
- Address occupational health issues and unfair working conditions of all small-scale fishers and fishworkers.
- Ensure comprehensive social protection to small-scale fishing communities.
- Promote consumer education to support small-scale fisheries development.

Value chains, post-harvest and trade

- Improve access credit, to infrastructure, market and landing centre facilities, particularly storage, water and sanitation, as well as amenities that facilitate the work participation of women, such as creches, toilets and sanitary facilities, and secure shelters and spaces to enable women to retain enhance their livelihoods throughout the value chain.
- Strengthen co-operatives and build their capacity to improve bargaining positions of small-scale fishers, fishworkers and fish processors. Ensure women have the support and educational resources to occupy leadership positions in such co-operatives.

Disaster risks and climate change

- Promote more research and use of alternative energy sources (solar, wind, etc.) instead of coal or hydro power plants.
- Protect communities against disasters and compensate communities that are impacted by climate change and natural disasters.

- Link national strategies for climate change and disaster risks to the local level.
- Adopt measures to protect crops from flooding and undertake research into varieties of rice and fish that are more resistant/ suitable for new situations, giving preference to indigenous species and traditional practices.
- Provide better information and knowledge on how the Mekong River Basin is affected by climate change and human activities with regard to fish, habitats, livelihoods, ecosystems, etc. and what the root causes are, including how upstream activities affect communities downstream. This also includes the need for proper impact and vulnerability assessments, and pre- and post-evaluations.
- Disseminate and communicate existing knowledge (including between countries).
- Develop early warning systems with regard to water quantity and quality upstream to make sure downstream communities have information. This should include tools for detecting fish disease.
- Promote, at the government level, harmonised regional policies and regulations and regional mechanisms for sustainable and responsible fisheries and develop safeguards against negative impacts of infrastructure projects through ASEAN and SEAFDEC, as appropriate.
- Involve existing regional mechanisms, or establish ones, if needed, in the Mekong River Basin to share experiences through social media regular meetings with regard to government policies towards achieving positive changes for fishing, farming and indigenous communities. One person in each country should be appointed to follow up and be the focal point.
- Small-scale fisheries organizations need to be strengthened and there is a need to develop capacity of community leaders with special emphasis on women and indigenous peoples.

For more

K

sites.google.com/site/ssfguidelines/home

Implementation of the SSF Guidelines

A Time for Reigning In?

Big environmental NGOs are being ceded concessions for large protected areas of land and sea without proper monitoring, control and enforcement

tates are ceding land and marine concessions to large non-governmental organizations (ENGOs), which are often set up as 'trusts'. These ENGOs then manage the environmental reserves ceded to them on behalf of the States. The board of these trusts, whose activities are financed by transnational corporations, decide by themselves-without any democratic control—environmental actions to be undertaken. Local communities and citizens are often uninformed about these projects or kept out of managing environmental reserves. They are also often direct victims like artisanal fishers and peasants.

Large industrial and financial corporations are increasingly investing in environmental activities.

Whilst the fight to combat climate change has, in large part, been entrusted by States to large ENGOs, and, for various reasons, transnational corporations finance these NGOs, the question now arises as to how what is often referred to as the 'environmental industry' is regulated. This was the question posed by Mathilde Jounot's film *Océan*, *La Voix des invisibles* (Ocean, the Voice of the Invisibles), shown at the film festival in Lorient, France.

Environmental protection is becoming a global industry. The 2015 Paris Climate Conference (COP 21) and French law are turning NGOs into 'service providers' for dealing with environmental compensation.

Large industrial and financial corporations are increasingly investing in environmental activities. Private transnational companies are also going to pay for the environmental actions and activities undertaken by NGOs to 'compensate' for the pollution caused by their activities or simply to invest in activities in a profitable sector. This is why private companies are financing, amongst other things, the buying up of debt by NGOs and why NGOs are becoming creditors for developing countries, taking the place Western States from whom they have bought the debt.

Let us imagine that an NGO financed by a transnational company buys up for US\$25 mn dollars from the French government the debt of a Small Island Developing State (SIDS) worth US\$100 mn. The French government agrees that this buyback will be reimbursed in part by its loan to the SIDS, but, above all, that within the framework development policy, it insists that the amount of this debt owed by the SIDS government be reduced to US\$50 mn. To do a 'debt for nature swap' and 'pay' the balance of this US\$50 mn debt which it owes to the NGO, the SIDS is going to cede maritime concessions to it in the same way that a State cedes a petroleum or mining concession to a transnational company. This concession will, in this case, be ceded free of charge in exchange for the relief of the entire debt.

Corruption

Extractive concessions (petroleum, gas, mines, etc.) have, for a long time, been the cause of corruption amongst officials and of violence meted out to

This article is by **Gilles Lhuilier** (glsn@orange.fr), Professor of Law, Ecole Normale Supérieure, Rennes, France, and Scientific Director of the GLSN, a Research Programme on the globalization of law of the Fondation Maison des sciences de l'homme (FMSH) in Paris (https://transnat.hypotheses.org)

local communities, forcing them out. This is also beginning to be the case for environmental concessions, examples of which include marine reserves conceded by States to large NGOs covering tens of millions of sq km. The case of traditional fishers obliged to abandon their livelihoods and to leave their villages is identical to the case of peasants who are forced to quit zones where petroleum is extracted.

Let us return to our hypothetical NGO which is benefitting from an imaginary maritime concession in a SIDS. No one is aware of the concession contract's content, nor about the rights ceded, nor the role of the transnational corporation that is financing the debt buy-back, nor the activities being undertaken by the NGO or by the transnational corporation in this concession. No one is associated with these activities and the question of the survival of the fishing and peasant communities will be managed by those who are involved in the start-up.

This environmental industry functions around the view that humans have only created disasters on land areas of the planet. The logical consequence of this assumption is to close these areas completely and without any appeal, exclude all human activities from them, and then create reserves. At the same time, this industry, conveniently forgetting that humankind is an integral part of ecosystems and should engage in the management of environmental actions, does not engage with local communities. Environmental activities must be framed in the same way that extractive activities were framed 20 years ago. Rights have been granted by the United Nations or by global extractive industries themselves in the framework of Corporate Social Responsibility (CSR), to local communities to combat, for example, the displacement of communities (UN Declaration on the Rights of Indigenous People, and other internationally accepted norms).

Concretely, we must develop a norm for environmental activities equivalent to the Extractive Industries Transparency Initiative (EITI) norm, a soft law, that has transformed the extractive industry. The EITI is a global norm to promote an open and responsible management of natural resources.

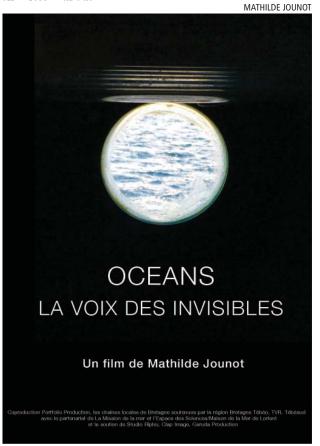
The EITI seeks to reinforce government and corporate sector systems, inform the public, allow open debate, and improve confidence. In each country, the EITI is supported by a coalition composed of governmental, corporate, and civil society representatives, working together.

This EITI norm, first of all, envisages transparency of extraction contracts and also of the payments made. Nothing is really known about what is contained in the concessions for maritime reserves. but since the EITI norm has been in place, extractive concessions are available on the Internet. Nothing is known about the income that the NGOs and transnational corporations draw from these environmental activities, and even less about

the long-term consequences for fishing and peasant communities.

This norm further envisages that local populations can be associated with the management of these concessions, which will be important for genuinely implicating the fishers or peasants in the management of the reserves. A World Bank report describes putting this norm into place and especially the national "mediators" who are engaged with the companies.

This norm, and also industrial mining norms such as those of the



Mathilde Jounot's film Océan, La Voix des invisibles (Ocean, the Voice of the Invisibles), shown at the film festival in Lorient, France

International Council on *Mining* and Metals (ICMM), agree on the rights of local communities to be consulted on these concessions which must include fishers and peasants, namely, the local populations.

NGOs, States, international institutions and transnational corporations will be called on to ratify the text.

These rights—to public two information and consultation by the local communities—will be formalised by investigators from the Global Legal Studies Network (GLSN), which, in co-operation with international organizations, will draft a text inspired by this mining right to regulate environmental concessions. International organizations of fishers and peasants will be associated with the drafting. This text will be called Environmental Organization Transparency Initiative (EOIT).

NGOs, States, international institutions and transnational corporations will be called on to ratify the text. Having ratified the text, organizations will then be engaged in applying it in their concessions or in the management of environmental actions. The EOTI norm will contain a clause on the 'choice of law', making explicit reference to the EOTI norm as the norm applicable to the relations between the contracting parties (States, large NGOs, transnational enterprises, financial institutions) which could be included in the in the environmental contracts industry.

This mechanism of contractual clauses referred to in the EOTI standard has been applied with success to regulate the extractive industry, which includes companies that are the richest and most powerful global industrial and commercial companies. This mechanism must become the principal route for the creation of transnational laws promoted by the United Nations.

For more

D

eiti.org/files/Implementing-the-eiti-FRE. pdf

De L' Initiative pour la transparence dans les industies extractives

papers.ssrn.com/sol3/papers.cfm?abstract_id=2657885

Adding Human Rights Punch to the New Lex Mercatoria: The Impact of the UN Guiding Principles on Business and Human Rights on Commercial Legal Practice

transnat.hypotheses.org/

International Society for Extractive Law and Practices

eiti.org/files/Implementing-the-eiti-FRE.

Extractive Industries Transparency Initiative

icmm.com/document/9714

International Council on Mining and Metals

ssrn.com/abstract=2657885

Adding Human Rights Punch to the New Lex Mercatoria: The Impact of the UN Guiding Principles on Business and Human Rights on Commercial Legal Practice

Funding Challenge

Small-scale and developing-world fisheries in different parts of the world receive funding from the Marine Stewardship Council Global Sustainability Fund

many small-scale developing-world fisheries, achieving the high standard required for Marine Stewardship Council (MSC) certification can be a significant challenge. Recognizing this challenge, two years ago (in March 2014), the MSC Board proposed the need for an official fund to support critical fisheries science and to assist small-scale/developing-world fisheries seeking to eventually become certified. The Global Fisheries Sustainability Fund (GFSF) launched in July 2015 with an initial £400,000, split over two years.

On II July 2016, the first batch of recipients was announced for the MSC's maiden GFSF. Blue Ventures, Anchud Mudcrab Productivity Committee, WWF Japan, Masyarakat Dan Perikanan Indonesia Foundation, WWF Guianas, and WWF Coral Triangle Program have received a total of £212,500. Thirty-three applications were received in total, out of which six were chosen.

These six organizations will deliver critical scientific research addressing information, technology and management gaps as appropriate to small-scale fisheries and build capacity of personnel to assist small-scale and developing-world fisheries. These projects, in the end, help strengthen knowledge and build capacity for fisheries aiming to achieve sustainability.

The winning projects particularly fit in with the objective of the fund which is to deliver critical scientific research that address information, technology and management gaps and barriers that fisheries encounter in achieving the MSC standard.

WWF Coral Triangle Program— Seafood products harvested from commercial fisheries are consumed all over the globe, providing the world's prime source of quality proteins. Developing-world fisheries continue to be an important source of seafood for markets across the world.

Although these fisheries are vital to food security and economic development, many are not managed sustainably. Data deficiency, lack of management structures and a lack of resources mean that most developingworld fisheries need to improve significantly to meet international sustainability criteria and benefit from the growing market for sustainable seafood. A key constraint

These projects, in the end, help strengthen knowledge and build capacity for fisheries aiming to achieve sustainability.

to amplifying fishery improvement efforts in these fisheries remains the cost of developing Fishery Improvement Projects (FIPs) benchmarked against the MSC.

Local experts

The WWF Coral Triangle Program will use its grant for a capacitybuilding programme to train incountry experts so they can carry FIP assessments and pre-assessments in Vietnam Indonesia. This will address growing need to increase the number of local experts in the Asia region who are experienced in applying the MSC standard and therefore able to support fisheries interested in using the FIP as a route towards certification.

This article is by **Angela McQueen** (angela.mcqueen@msc.org), Southern Africa Communications and Office Manager, Marine Stewardship Council, South Africa

Masyarakat Dan Perikanan Indonesia Foundation (MDPI)— Indonesia is one of the leading producers of wild capture fish and is the biggest tuna-producing country in the world. Yet, like in many developing-world fisheries, country has challenges in trying to move its fishing sector to become more sustainable. As a big tuna exporter, Indonesia's tuna supply chains need to improve in order to be considered sustainable and transparent.

MDPI was founded in July 2013 with a focus on small-scale artisanal fisheries. Together with its partners Asosiasi Pole and Line dan Handline Indonesia (AP2HI), UNIDO Indonesia and the International Pole and Line Foundation, MDPI will use funding from the GFSF to prepare a risk assessment of tuna supply chains in Indonesia which will provide much-needed information on supply chain structure in that region. The aim will be to gather much-needed information and recommendations on how to achieve compliant Chain of Custody approaches within that sector and in the region.

WWF Guianas will apply datalimited assessment and management methodologies to the Suriname coastal artisanal fishery. Suriname

The Surinamese fishing sector is estimated to directly employ nearly 10,000 people...

is located in the northeastern part of South America, facing the Atlantic in the north and bordering Brazil in the south. It is part of the Guianas, with Guyana on its western border and French-Guiana on the east. Most of the country is covered by tropical rainforest, harbouring a great diversity of flora and fauna.

Fishing is an important economic activity in Suriname. The Surinamese fishing sector is estimated to directly employ nearly 10,000 people and generate some 40, 000 tonnes of wild

captured fish and shrimp annually. The artisanal fleet is the most important fishing sector in Suriname, accounting for 60 to 70 per cent of the landings, generating most of the employment and delivering fresh fish to the local market.

There are many signs that the coastal artisanal fishing fleet in Suriname is overfishing target species, yet there is no scientific data on the stock status of the exploited species.

WWF Guianas will, therefore, use its grant award to apply datalimited assessment and management methodologies to the Suriname coastal artisanal fishery, and will contribute to the MSC's wider initiative that will allow datalimited fisheries to demonstrate that their sustainability meets the MSC requirements.

The Anchud mud crab fishery will use its grant to understand the likely barriers to certification of this artisanal fishery, in a region which has many such fisheries. It aims to build awareness of MSC requirements among stakeholders and undertake a gap analysis of the fishery.

WWF Japan will implement an FIP of enhanced Manila clam fishery in the Yellow Sea Ecoregion (YSE), which could lead to major benefits environmental in globally important mudflats as well sustainable Manila clam production and consumption. One of WWF Japan's focal projects is conserving the YSE, surrounded by China and the Korean Peninsula.

Local people in China, Korea and Japan highly depend on seafood from the YSE. In China, bivalves targeted by coastal fishers in the YSE are a staple for local people. Manila clam, in particular, sustains the lives of a large number of people living not only in China but also in neighbouring countries. Thus it is a key contributor to regional food security.

Environmental benefits

Successful implementation of the project could lead to major environmental benefits in the globally important mudflats as well



A Madagascar octopus fisherman. Octopus fishing is an economic lifeline for around 80,000 small-scale fishers, over half of whom are woman

as sustainable Manila clam production and consumption.

Blue Ventures will implement FIP activities in the Madagascar octopus fishery, and explore application of data-limited assessment and management methods to these types of fisheries.

Octopus fishing is an economic lifeline to around 80,000 small-scale fishers, over half of whom are women. Madagascar's fishing economy is critical for the livelihoods and food security for over 250,000 people. Blue Ventures works in places where the ocean is vital to local cultures and economies, and are committed to protecting marine biodiversity in ways that benefit coastal people. The grant will contribute to efforts to improve management in the octopus fishery, and its preparation for certification.

The applications period for 2017-18 will be announced later this year (2016). The fund is open to academic institutions, independent researchers, fishers, governments and

non-governmental organizations. The MSC would like to encourage contributions from other organizations to enhance the overall scale and reach of the fund.

Any queries regarding the fund can be emailed to GFSF@msc.org \$

For more

msc.org/

Marine Stewardship Council

msc.org/about-us/credibility/all-fisheries/ global-fisheries-sustainability-fund

MSC Global Fisheries Sustainability Fund

CSO Declaration

Small farmers, agriworkers, fishworkers, pastoralists, Indigenous Peoples, consumers, NGOs, women and youth from Europe and Central Asia speak out

e, the 56 representatives of small farmers, agricultural workers, fishing communities fishworkers, pastoralists, Indigenous Peoples, consumers, nongovernmental organizations (NGOs), women and youth, representing civil society organizations (CSOs) at the local, regional, national international levels in the region of Europe and Central Asia, came together in Antalya, Turkey, on 2-3 May 2016 to provide our contributions to the 30th FAO Regional Conference for Europe and Central Asia (4-5-6 May 2016, Antalya, Turkey).

Food policies at local, national, regional and global levels should relate to the realities of people...

We appreciate the efforts of FAO in supporting the civil society and democratic grassroots movements to collectively strengthen the voice of the millions of small-scale food producers and family farmers who are recognized by this regional FAO conference as the backbone for rural development and improvement of livelihoods, and who provide the bulk of our food. They, together with consumers, also represent those most affected unsustainable by food systems. As CSOs, we wish to emphasize that we contribute on a daily basis to achieving the Development Sustainable (SDGs) and the FAO objectives at local, national and regional levels, and we are committed to continue doing so.

Food policies at local, national, regional and global levels should

relate to the realities of peoples, small-scale food producers, workers, consumers, women and youth alike. CSOs bring together democratic grassroots movements and are thus the best placed to provide direct, evidence-based knowledge of these realities. CSOs are organized to represent these various constituencies of those affected by agriculture and food-related policies, not as passive beneficiaries or mere input-providers, but as active rights' holders who are entitled to be involved in policy processes that directly affect their very lives as well as the environment in which they live, and the markets on which their livelihoods depend.

We call on this conference to address the humanitarian crises in the region that leads to the influx of hundreds of thousands of refugees, migrants and internally displaced persons conflicts fleeing situations of despair. This is the result of war, low-intensive internal conflicts or deprivation of means to a dignified life, and we must ensure that their right to food and all other human rights are duly respected. We condemn the policies that have caused such wars, conflicts and deprivation, in the first place, and also the treatment of refugees, (forced) migrants and displaced persons that fails to respect their fundamental human rights.

Food security

FAO should, and can, play an important role in ensuring that they are food-secure, have access to natural and other productive resources, have greater access to healthy nutritious food, with special emphasis on women, children and elderly persons. Several of our CSOs

This statement is from the CSO Regional Consultation, held on 2nd and 3rd May, 2016, prior to the FAO's 30th Regional Conference for Europe and Central Asia (ERC) in Antalya, Turkey are currently working in different European Research Council (ERC) countries to support asylum seekers' access to land to grow some of their own food. FAO should also facilitate and support these initiatives.

We also call on this FAO Regional Conference in Antalya to be a milestone for setting a coherent and holistic policy framework that reaches beyond business-as-usual.

The only way to overcome poverty and malnutrition and ensure food security is through a human-rightsbased approach that respects nature. Current international trade policies have failed dismally. However, they still largely shape our food policies, despite continuous violations of human rights, persistent food and and nutrition insecurity, their dramatic consequences on our planet. The only way to overcome this is through a new policy framework based on human rights and food sovereignty. Our current system is socially, ecologically and economically unsustainable. need an urgent and profound transformation of our food systems to ensure a sustainable future for people and nature in all the countries of our region. FAO has an important role to play at the regional and national levels to ensure these aspects are fully implemented.

The current food system is unfair and patriarchal, so for us, it is a critical priority to develop gender-sensitive policies that promote women's empowerment and gender equality, ensure a fair share of the benefits of our work, guarantee access to natural resources and means of production, and access to decision-making spaces.

It is necessary to recognize and value the role that women play in food sovereignty and nutrition.

The traditional knowledge and (unpaid) daily work of women continues to ensure the protection of territories and biodiversity today as in the past. To move forward with this agenda, we highlight the importance of proposals made by the women's movement and the feminist economy, in which the sustainability of life is a central issue for the development of a sustainable future.

We, therefore, declare that the following priorities should duly be taken into account:

1. AGROECOLOGY

We appreciate that FAO recognizes our agroecological knowledge and practices. These are essential in meeting diverse goals such as in reducing rural poverty, eradicating hunger and malnutrition, achieving sustainable agriculture development, fighting climate change, creating decent work for youth, reducing dependence on external agro-chemicals, increasing involvement of local communities and Indigenous Peoples, especially at the community level for soils, water, biodiversity conservation and women's knowledge of seed-saving and exchange.

Agroecology is, however, still far from being fully acknowledged by FAO and Member States as the alternative to unsustainable food systems. This is often aggravated by lack of meaningful consultation with, and participation of, our constituencies. Our governments



The 56 representatives of small farmers, agricultural workers, fishing communities and fishworkers, pastoralists, Indigenous Peoples, consumers, NGOs, women and youth, representing CSOs came together in Antalya, Turkey, during 2-3 May 2016

have been contradictory in their actions by actively promoting and sponsoring the destructive industrial agriculture model, in spite of the important body of scientific evidence showing that it makes a significant contribution to climate change; they have also allowed the grabbing and destruction of land, water, fish stocks and other natural resources by corporations and sovereign funds, as well as the destruction of our constituencies' livelihoods.

2. ACCESS TO LAND, WATER, SEEDS, FISH STOCKS AND FORESTS

All over the world, people's access to the natural resources on which they depend for their livelihoods and ways of life is being ring-fenced by (trans)national capital and state predation. This is equally true for the European and Central Asian (ECA) region, where land and water grabbing, regressive laws on seeds and genetic resources, deforestation and the erosion of biodiversity and failure to manage fish stocks, create an adverse environment for the region's small-scale food producers,

The bulk of the food consumed in the world and in the region is produced by us, the small-scale food producers and family farmers.

fishers and rural peoples. These developments run counter to the vision put forward by the CSOs of the region for whom natural resources are part of the Commons that are an indivisible and indispensable part of their local food systems, living spaces, and territories rather than pure commodities. Securing access to, and effective control over, land, water, fish stocks and fish, seeds and forests, is, therefore, identified as a key priority area for CSOs in the ECA region.

The FAO Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests (VGGT) and the FAO Voluntary Guidelines on Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (VGSSF) are critical tools to secure the tenure rights of the region's small-scale food producers and family farmers, and secure access to fish stocks and fish, given that they are anchored in a humanrights-based approach, respect nature and explicitly prioritise vulnerable and marginalized groups. CSOs, however, still perceive a bias in which the governments of the ECA region interpret these Guidelines, them primarily seeing as instrument for their development co-operation work in the global South, rather than to be applied and translated into public policy "at home".

Communities need access to knowledge and education as a common good. It is important to recognize the value of the traditional knowledge that has been central to food sovereignty for centuries. Traditional knowledge must be valued and recognized at the same level as expert knowledge by governments and FAO. We need to reinforce a deeper dialogue between these two types of knowledge.

3. LOCAL and TERRITORIAL MARKETS

The bulk of the food consumed in the world and in the region is produced by us, the small-scale food producers and family farmers. Most of this food is channelled through the local and territorial markets, our markets. They are the most important for food security and nutrition. Our markets are situated in, and identified with, specific territories. In this sense, they are localized. They can range from village to national or regional levels; they can also be transboundary. They can include rural, peri-urban and urban areas. Building on our local and indigenous knowledge, they perform multiple functions within their given territories, starting with, but not limited to, the provision of diversified and nutritious diets, their contribution to the territorial economy and employment, and to the defence of biodiversity and territorial ecosystems. Local and territorial markets are central to the realization of many SDGs. They are highly inclusive of, and accessible to, smallscale food producers and other categories of food-insecure people, and provide quality food to consumers. They can be especially advantageous to producers when they involve direct "farm to fork" or "deck to dish" sales such as Community Supported Agriculture, Community Supported Fisheries and Farmers' Markets. Short supply chains that eliminate or reduce the role of middlemen benefit both producers and consumers. We want these markets to be recognized and supported by appropriate public policies, and request support for increasing mapping of relevant data to make them more visible. Public procurement at the local level should also prioritise access for groups of small holders. Public policies should not create opposition between food standards/food-safety regulations that should be context-appropriate, and the access of small- scale food producers to local and territorial markets.

More specifically to the agenda of the 30th ECA regional conference, we wish to make the following recommendations:

Agenda point Committee on World Food Security

The following recommendations are put forward to the FAO Regional Office, Country Offices, and the governments of the ECA region.

We hereby request that they:

- Recognize, take stock of, and monitor pressing issues linked to land, water, seeds, fish stocks and forests, paying special attention to the tenure rights of vulnerable and marginalized groups, especially the region's small-scale food producers of the various constituencies.
- Commit to the full implementation of the VGGTs in the region, with the understanding that the VGGTs are much more than a tool for establishing a land registry and that they should address all fundamental inequalities in the access to, and control of, natural entities.

 Ensure that CSOs in the region (and not simply big donors) are active participants and true partners in the dialogue to identify the pressing issues linked to natural resources and in the implementation of the VGGTs in the region.

Similarly, emphasis needs to be placed on using and implementing the VGSSF Guidelines, to recognize the contribution of small-scale fisheries (both inland and coastal), and adopt the combined human-rights-and ecosystems-based approaches advocated. FAO and governments

Traditional sustainable fish(eries) knowledge and practices should be validated and decentralized (community-based) co-management should be promoted.

should, therefore, adopt policies that ensure that:

- Traditional sustainable fish(eries) knowledge and practices should be validated and decentralised (community-based) co-management should be promoted. Fishers need to be involved in data collection and analysis.
- Both professional and recreational fishers should benefit equally from management of inland fisheries.
 Management should be focused on optimizing fish harvesting to enable professional fishers to fish in a sustainable way, and also earn a decent livelihood, and provide healthy protein to local communities. The needs of recreational fishers can also be addressed in a non-competitive way.
- The roles of small-scale fishery workers throughout the value chain need to be recognized and respected, particularly women who make up at least 50 per cent of the workforce. Women are often engaged in pre-harvest and postharvest activities, and in support roles that are frequently not recognized and are poorly paid.

FAO and government policies should recognize that it is not

international trade, but local and territorial markets that are the most important space of food provision, and as stated above, they must be better understood, documented and supported in the work-stream of connecting smallholders to markets.

...the FAO priorities completely fail to acknowledge the contribution of agricultural and food workers to achieving decent work.

Agenda point Sustainable Development Goals

We welcome the recognition of SDGs as universal and indivisible, and, therefore, relevant to, and implemented by all countries, including the developed ones. National strategies to realize them should also ensure they facilitate—rather than impede—their realization in their own and other countries and at the global level. The challenges of realizing the SDGs and human rights cannot be met by focusing on the intensification of agriculture, fisheries and aquaculture, or by a process that provides the corporate sector with a predominant role in the SDG 17: Strengthening the means of implementation and revitalizing the global partnership for sustainable development. Instead, we urge the FAO and States to address the structural causes of our unsustainable food systems, challenge their power structures, and emphasize the transformative potential of our sustainable food systems.

We, therefore, wish to draw your attention to the fact that SDG 12 on sustainable production and consumption patterns, SDG 13 on combating climate change are particularly relevant to smallscale food producers and consumers. Unsustainable production and consumption patterns and greenhouse gas emissions of the ECA region, in particular in those of its rich Member States, are a significant cause of hunger, food and nutrition insecurity, both in their own and in other countries. Small-scale producers, on

the other hand, generally use low-impact methods of production and small amounts of fossil fuels, all of which naturally mitigate climate change.

The work on SDG 2 includes not only farmers but also fishers and Indigenous Peoples. Even though SDG 14 on water and SDG 15 on territorial ecosystems are considered by FAO in their contribution to the realization of Goal 2, fishing communities and fishworkers as well as indigenous peoples must be recognized as key stakeholders and participants in the governance of these resources.

We acknowledge the recognition of SDG 8 on full and productive employment and decent work for all. However, we are concerned that the FAO priorities completely fail to acknowledge the contribution agricultural and food workers. The waged workers do not own or hire the land they work on and, as such, are a distinct group from small-scale farmers. The creation of economic growth and increasing income for employers often fails to result in the payment of a living wage to waged workers. We also stress the importance of social-protection policies ensure sustainable to livelihoods for those who have precarious jobs, or those who are not able to access jobs (including seasonal agricultural workers, migrants, elderly, jobless and sick people). We call on governments to implement policies that guarantee living wages and income to all as well as comprehensive social-protection policies to lift people out of poverty and malnutrition.

FAO and governments should ensure the application of fundamental and sector-specific ILO Conventions in order to achieve a fairer distribution of value in the food chain and thus reduce poverty in rural areas. Agricultural and fish workers need to be able to organize in independent, democratic trade unions that represent their views and to be able to bargain collectively to improve their working conditions and get paid a living wage. We urge FAO and governments to increase their efforts to eliminate forced labour in the food and agricultural sector.

SDGs should provide a radical space for young people to contribute the social and ecological transformation that is underway in many of our societies. Youth bear the responsibility for carrying forward the collective knowledge learned from their parents, elders and ancestors into the future. It is essential that the policies create the space and conditions for youth to start practicing their livelihoods, including by ensuring them access to income, resources, decent work, education and knowledge.

Agenda point International Year of Pulses

We appreciate that the 68th United Nations General Assembly declared 2016 as the International Year of Pulses. We acknowledge the nutritional value and health benefits of pulses as well as their ecological benefits. Raising public awareness is important, but not sufficient. FAO should work to integrate the policies around pulses into State policies because:

- Pulses are important for human health and an essential source of food and protein for many, especially for poor people. Pulses not only create economic value but are a source of life for humans and animals.
- Pulses link nitrogen from the air to the soil and plants. However, if chemicals, pesticides or other ecologically devastating production techniques are used in their production, the beneficial role of pulses becomes ecologically devastating.
- Pulses also provide solutions to climate change if they are produced through agroecological techniques.
- Given the detrimental effects on food safety and food sovereignty, we strongly oppose the use of genetically modified organism (GMO) technology, as well as new breeding techniques, and the technology of mutation breeding

used in attempts to develop new varieties of plants and animals, including pulses. We support safer and socially more inclusive methods of traditional and participatory breeding based on local knowledge.

Finally, we welcome the FAO Strategy on Partnership with CSOs and the re-affirmation that the views of independent CSOs are recognized and contribute to the policy, normative and technical discussions convened by FAO. We welcome the proposal to further strengthen relations between FAO and CSOs in the region and to increase the involvement of CSOs in policy-making processes and the monitoring of implementation policy specifically concerns the region. We welcome and support the creation of a CSO Facilitation Committee to contribute to this process in a constructive way. We are committed to ensuring it will work to fulfil this mandate, and look forward to a constructive dialogue between Regional Office, FAO the FAO Sub-Regional Offices, governments

We also welcome you all to meet us at our second Nyéléni Europe Forum for Food Sovereignty that will be held in Cluj-Napoca in Romania from 26 to 30 October 2016.

For more

R

foodsovereignty.org/declaration-of-csosat-the-30th-fao-regional-conference-foreurope-and-central-asia/

CSO Declaration

2016.csoconsultation.org/

CSO Consultation for the FAO Regional Conference for Europe and Central Asia

Making SSF Secure

The 32nd Session of the FAO Committee on Fisheries (COFI) held elaborate discussions in July 2016 on Agenda Item 9: Securing Sustainable Small-scale Fisheries

t the invitation of Fábio Hazin, Chairperson, Committee on Fisheries (COFI), Audun Lem, Deputy Director, Fisheries and Aquaculture Policy and Economics Division (FIP), Food and Agriculture Organization of the United Nations (FAO)—assisted by Nicole Franz, Fishery Planning Analyst, of the same Division—introduced the Item 9: Securing Sustainable Smallscale Fisheries (COFI/2016/7) on Wednesday, 13 July 2016—the third day of the 32nd Session of COFI. He said the instrument Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) complements the

SSF actors, as well as others, was vital implementation of the Guidelines. The proposed SSF Global Strategic Framework (SSF-GSF), in this context, was to complement the FAO Umbrella Programme for the Promotion and Application of the SSF Guidelines (hereafter, Umbrella Programme) and to strategically promote a common vision and implementation approach by partners. It would, in particular, full promote and effective participation of SSF actors in the SSF Guidelines implementation and also encourage participation by actors, under overall implementation responsibility of governments, he observed. SSF-GSF could also monitor progress in regard to the achievement of the Sustainable Development Goals

especially by applying the principles

of the SSF Guidelines. Along with

governments, effective participation of

Lem drew attention to various initiatives for implementing the SSF Guidelines, including the FAOsupported experience-sharing implementation and the International Fund for Agricultural Development (IFAD)-supported initiatives strengthening the SSF actors towards implementing the Guidelines. Smallscale fishing community organizations played a role in providing valuable feedback, he said. Translating the Guidelines into action mainstreaming them into policies and

programmes were not easy processes,

he observed. The Committee was invited to share information on

initiatives in support of the SSF

Committee was further invited to

advise on mobilizing extra-budgetary

implementation.

The

Guidelines

(SDGs), particularly SDG 14.

Translating the SSF Guidelines into action and mainstreaming them into policies and programmes were not easy processes...

Code of Conduct for Responsible Fisheries (CCRF) and it represents the first-ever international instrument dedicated entirely to small-scale fisheries (SSF).

The SSF Guidelines propose a holistic approach, he said. Thev reflect the importance of extending livelihood support communities, uphold human rights standards and articulate the FAO perspective on human rights, he added. The agenda paper COFI/2016/7 reported, on the one hand, progress towards implementing the Guidelines and recommended, on the other, the need for further developing the Global Assistance Programme (GAP) in a participatory manner,

This article has been written by **Sebastian Mathew** (icsf@icsf.net), Executive Secretary,
ICSF

resources through the Umbrella Programme, and on steps to be taken in developing the SSF-GSF, especially its structure.

Speaking on behalf of the African Union (AU)—a Union of 54 Member States from Africa and the Southern Indian Ocean—Kenya said 60 per cent of AU fish production originates from SSF. Attention was drawn to the 2015 Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa that seeks application among its membership of the SSF Guidelines at the national level towards attaining food security and poverty reduction goals. Specifically referring to Kenya, it was observed that the SSF Guidelines were to be integrated at all levels into policy and legal formulations and into development of management measures, starting from the Beach Management Units (BMUs).

Whilst supporting SSF-GSF, South Africa informed the Committee that fishing rights in South Africa are currently confined only to large-scale fishers. The 2012 Policy for the SSF subsector addresses inequalities and promotes equitable access to food security, poverty alleviation and

socioeconomic development. A new framework is being created in South Africa to allocate fishing rights to SSF communities within a rights-based approach to fisheries.

Morocco said the SSF subsector employs 60,000 people and is socially important. Towards restructuring the subsector, to implement protected areas and to improve safety of workers, a national plan for coastal SSF is currently being developed. SSF Guidelines and SDGs are important tools to keep track of the impact of SSF on the environment, it was observed.

Algeria drew the attention of the Committee to a regional conference hosted by the General Fisheries Commission for the Mediterranean (GFCM) of the FAO on SSF in the Mediterranean and the Black Sea, where a panel was dedicated to discussing the implementation of the SSF Guidelines in the region. A working group, as a result, has been set up to facilitate implementation with the participation of fishworker organizations, mainly toward fostering co-operation, improving socioeconomic conditions diversifying livelihoods.



The 32nd session of the Committee on Fisheries (COFI), FAO, Rome, Italy, 11 - 15 July 2016. COFI noted the proposal by GRULAC to establish an International Year of Artisanal Fisheries and Aquaculture to improve small-scale fisheries

Afghanistan said SSF are important for nutrition and eradicating rural poverty, and should remain a top priority under the Blue Growth initiative of FAO. It advocated wider availability of the Guidelines in different languages. The Umbrella Programme and the SSF-GSF should go hand in hand, it was observed.

Bangladesh supported Afghanistan's position and also sought FAO's assistance in implementing the SSF Guidelines at the national level. Malaysia said 58 per cent of its fisheries workforce comprised small-scale fishers and it would like effective operationalisation of the Guidelines.

Indonesia drew attention of the Committee to a Southeast Asian regional consultation workshop on the implementation of the SSF Guidelines in Bali on 24-27 August 2015, which was a collaborative effort of Indonesia, FAO and SEAFDEC. It also updated the Committee about the development of a Southeast Asian Regional plan of action for implementing the SSF Guidelines focusing, inter alia, on policy coherence and capacity development. At the national level, Indonesia is developing a national plan of action on SSF management.

Japan, whilst commending the development of the SSF Guidelines, was keen on a regional approach to implementation, considering that SSF are diverse across regions

The Sultanate of Oman welcomed the SSF Guidelines and told the Committee that it had jointly hosted a Near East and North Africa Regional Consultation Workshop for the implementation of the SSF Guidelines from 7 to 10 December 2015 in Muscat with GFCM and FAO. The Workshop was attended by participants from 25 countries.

The Republic of Korea welcomed SSF-GSF and said the FAO secretariat should evaluate the implementation of the SSF Guidelines by COFI members.

Japan, whilst commending the development of the SSF Guidelines,

was keen on a regional approach to implementation, considering that SSF are diverse across regions. Working together with FAO regional bodies was essential in this context. Japan apprised the Committee that it is collaborating with the Southeast Asian Development Center (SEAFDEC) to develop regional initiatives for the implementation of the Guidelines.

Brazil, speaking on behalf of the Latin American and Caribbean Group (GRULAC) of 33 States, drew attention to the multidimensional nature of the SSF subsector, including its cultural heritage and social inclusion facets. While supporting the development of SSF-GSF in accordance with FAO rules and procedures, and agreeing that FAO is the 'custodian' UN agency for SDG 14, the GRULAC was of the view that monitoring SDGs is the role of the high-level political forum.

Speaking on behalf of the Central America Fisheries and Aquaculture (OSPESCA)—an Organization organization comprising eight States-Panama spoke of a new regional policy to integrate fisheries and aquaculture and a programme to disseminate and implement the SSF Guidelines. The policy, the Committee was informed, was developed with the full and effective participation of civil society organizations (CSOs), the Confederation of Artisanal Fishers of Central America (CONFEPESCA), governments and the FAO subregional office. Panama also drew attention to a proposal of the Central American Integration System (SICA)—the economic and political organization of eight Central American States—to initiate consultations and formalities establishing an International Year of Artisanal Fisheries and Aquaculture. The Committee was informed that the proposal welcomed by the 34th FAO Regional Conference for Latin America and the Caribbean, held in Mexico from 29 February to 3 March 2016.

Dynamic approach

Costa Rica stressed adopting a dynamic approach to the implementation of the SSF Guidelines, with a holistic view of the environmental, economic and social dimensions of SSF. The proposed SSF-GSF, would, it was observed, allow for the application of the SSF Guidelines by adopting a cross-sectoral and inter-ministerial approach. Costa Rica encouraged COFI to endorse SSF-GSF, especially to serve vulnerable and marginalized fishing communities. The Bahamas commended the SSF Guidelines and the proposed SSF-GSF.

Chile observed that the SSF Guidelines applied to its national context, especially to improve fisheries management, to reduce pressure on fish stocks, to help diversify SSF as well as to adapt to climate change. It is currently consolidating a new fisheries-management system and strengthening institutions to enhance the competence of small-scale fisheries. SSF are also important to counter cyclical fluctuations in economic activities in coastal areas.

St.Kitts and Nevis supported the implementation of the SSF Guidelines to manage multigear/multispecies SSF, to prevent the continued collapse of the marine ecosystem and to reduce poverty.

Norway said it is a real challenge to see the SSF Guidelines implemented. Norway hoped its financial support to regional workshops and the Umbrella Programme would improve living conditions of fishers. The Guidelines should get incorporated into relevant fisheries and socioeconomic instruments and should lead to the development of participatory decision-making processes. Norway saw fishers and fishworkers as drivers of change and observed that others could supplement and strengthen implementation programmes. sought more details on the purpose and role of SSF-GSF, especially in regard to how the proposed mechanism can help implementation of the SSF Guidelines.

The representative of the European Union (EU) said the EU and its member countries pay great attention to the SSF Guidelines and they were keen to promote and apply the Guidelines to artisanal fishing communities, especially to maintain viability of coastal areas. The EU framework of cooperation and development policies

at the regional and national levels would include the SSF Guidelines, the Committee was informed. The EU said it saw value in developing SSF-GSF to complement the Umbrella Programme.

The Russian Federation said the SSF Guidelines are a key step forward for a socially important sector and it supported the SSF-GSF.

Canada drew attention to its small-scale, owner-operator types

Norway saw fishers and fishworkers as drivers of change and observed that others could supplement and strengthen implementation programmes.

of fishing operations and their contribution to sustainable fisheries and sustainable development. Canada supported the SSF Guidelines and encouraged their implementation and capacity building also in developed countries, in collaboration with CSOs, NGOs and the academia.

The United States strongly supported the SSF Guidelines, welcomed the SSF-GSF and was keen on it being developed in the same inclusive spirit as in negotiations to develop the Guidelines.

Other countries spoke about the importance of SSF in their national context. These included Somalia, Cambodia, India, Iran, Nicaragua, Uruguay, and Guyana.

Somalia drew attention to lack of infrastructure leading to post-harvest losses in the SSF subsector, lack of experience and skills as well as poor fishing capacity preventing exploitation of underutilized fish stocks, and conflicts with foreign illegal, unreported and unregulated (IUU) fishing undermining the livelihoods of local small-scale fishers.

Food security

Cambodia drew attention to the important role of SSF in food security and nutrition. To ensure that natural fisheries resources benefit the poor rather than the elite, Cambodia adopted fisheries reforms in the year

2000 to contribute to livelihood and food security of the poor. Under a rights-based management regime, Cambodia converted individual rights to collective rights through a top-down approach, establishing community fisheries organizations, to benefit millions of small-scale fishers. Cambodia is the only country where aquarian reforms have been introduced, backed by an elaborate legal structure and a governance framework. The transition individual to collective rights, the Committee was informed, helped making responsible use of living resources in a sustainable manner.

India would like support from like-minded countries to build up expertise for ecolabelling of endemic species, caught by small-scale fishers, to enhance their access to the international seafood market.

Iran reported that it accounted for the largest number of small-scale fishers in the Near East. The subsector plays an important role in relation to employment, food security, coastal development and income for local population. Iran is training smallscale fishers to develop value-added products and also to improve their fishing practices, especially by substituting non-selective nets with selective hooks. It is promoting stocking of the Caspian Sea and encouraging marine farming to sustain livelihoods through better income.

Nicaragua reported that its human development plan integrates the SSF subsector. It is developing national policies to build institutional capacity also in the fisheries sector, especially to manage economic inputs like fishing equipment and fuel, and to manage output through better market access at the national and international levels.

Uruguay said it has SSF activities in the rural and urban areas and these are mainly export-led activities. There is legislation in place that allows small-scale fishers to access social benefits and health services through local councils. Subsidies are being eliminated and good practices are being promoted in the interests of the subsector. Uruguay was supportive of

establishing an International Year of Artisanal Fisheries and Aquaculture to promote good practices and to encourage participation in fisheries management.

Guyana said SSF are significant in the Caribbean region, especially for income generation. The national fisherfolk organizations—federated into the Caribbean Network of Fisherfolk Organizations (CNFO)—are influencing policies and decisions in the region. New priorities to be addressed in the region are post-harvest practices, risk insurance and financing of port handling.

Of the 29 countries that took the floor on this Agenda Item, II spoke about SSF-GSF (South Africa, Afghanistan, Bangladesh, South Korea, Costa Rica, Brazil, Norway, EU, Russian Federation, the US and the Bahamas).

Five regional fisheries bodies also took the floor. The Lake Victoria Fisheries Organization (LVFO) of the East African Community welcomed the SSF Guidelines and recognized the application of the Guidelines also to inland fisheries. OSPESCA said it has developed a roadmap for implementing the SSF Guidelines. It encourages the participation of regional CSOs in the fisheries sector in its programmes and is keen to ensure mechanisms for participation of fishworkers in the implementation of the SSF Guidelines. It also spoke in support of establishing SSF-GSF.

Regional plan

SEAFDEC observed that different regions need different strategic approaches when it comes implementing the SSF Guidelines. It is developing a regional plan, a regional approach and a regional programme at the level of Association of Southeast Asian Nations (ASEAN) for implementing the SSF Guidelines. The regional programme is expected to be endorsed by the ASEAN high level in 2017. SEAFDEC will be approaching GAP for assistance. The Sub-Regional Fisheries Commission (CSRP/SRFC) of seven West African States said it is fully committed to implementing the SSF Guidelines.

The Regional Fishery Body Secretariats Network (RSN), comprising secretariats of around 50 advisory bodies and bodies with mandate for conservation management of fishery resourceswith their focus ranging high-seas fisheries to coastal fisheries, inland fisheries and aquaculturerecognized the importance of SSF as well as the need to secure a cross-cutting approach that would reach a wider audience, to support the implementation of both SSF and Guidelines the Voluntary Guidelines on the Responsible Governance of Tenure of Land. Fisheries and Forests in the Context of National Food Security.

In a joint statement—facilitated the International Planning by Committee for Food Sovereignty (IPC)—the World Forum of Fish Harvesters and Fish Workers (WFF), the World Forum of Fisher Peoples (WFFP) and the International Collective in Support of Fishworkers welcomed the proposed (ICSF) SSF-GSF mechanism as a complement and enhance the FAO Umbrella Programme. The proposed GSF, it was held, would provide a framework to oversee efforts at the national and regional levels to ensure co-ordination, co-operation coherence in implementing the SSF Guidelines.

Summarising the discussion, at the invitation of the Chairperson, COFI, Lem of FAO Secretariat—assisted by Franz—made the following observations.

reconfirmed The Committee the important multidimensional SSF in terms of poverty reduction; food security and nutrition; social cohesion, stability and development; values; income employment generation; and overall living conditions and livelihoods. The Committee recognized the SSF Guidelines as a global consensus tool for achieving sustainable fisheries in both developing and developed countries, grounded in human rights.

The Committee reiterated continued collaboration towards implementing the Guidelines in

close collaboration with partners. The Committee called for further guidance to address the issues eco-labelling, market access. benefit distribution and enhanced competitiveness in the context of the SSF Guidelines implementation. The Committee noted the progress made by members who shared information on relevant national and regional experiences in support of the SSF Guidelines implementation, not only in relation to the involvement and empowerment of SSF actors in relevant decision-making processes, but also in relation to specific technical and infrastructural support to SSF, including access to social services.

The Committee saw the scope for implementation going far beyond the fisheries sector. Support for mainstreaming efforts at all levels was seen important. There was confirmed commitment in supporting regional processes in this regard. FAO regional offices and regional fisheries bodies were to be involved in this process. The implementation was also seen as a key component in FAO's Blue Growth initiative and its global strategic plans. The Committee welcomed further development of the Global Assistance Programme into an Umbrella Programme and it agreed on the need for a complementary mechanism for a SSF-GSF in relation to the strategic aspects of the SSF Guidelines implementation, which should in particular ensure the full and effective participation of SSF actors. The Committee invited FAO to further spell out the purpose, role and structure of the SSF-GSF and to explore the potential role of the SSF-GSF in relation to progress monitoring, including under SDG 14.

The Committee noted the proposal by GRULAC to establish an International Year of Artisanal Fisheries and Aquaculture as an important opportunity to further consolidate efforts in relation to improving small-scale fisheries.

For more

R

www.fao.org/about/meetings/cofi/en/

32nd session of the Committee on Fisheries (COFI)

Roundup News, EVENTS, BRIEFINGS AND MORE...

OCEAN SCIENCE

Effects of Rising Ocean Acidification on Fisheries in Spotlight

A reef fish that can't find its way home and whose erratic behaviour constantly puts it in danger might make a nice premise for a children's movie, but oceans filled with Dory's could spell disaster for their survival.

Higher atmospheric carbon dioxide levels means more is being absorbed in seawater, with some young fish's nervous systems being affected.

Not with standing the wonderful diversity of marine wildlife around our shores, with 130 species commercially fished in New Zealand and worth \$1.2 billion annually, finding out what's in store for them in a warming world is important.

If snapper and others start showing Dory traits fishery's could be affected.

With a budget of nearly \$5 million over 4 years researchers at Niwa, Cawthron Institute in Nelson, University of Auckland, and Otago University under the Carim (Coastal Acidification: Rate, Impact and Management) programme will be looking at affects on phytoplankton, aquaculture species paua and greenshell mussels, and young snapper.

They'll also incorporate data from long term monitoring already going on at 14 diverse sites around the coastline—part of the New Zealand Ocean Acidification Observing Network (NZOA-ON) to develop models, and hopefully come up with some solutions.

How rising ocean acidification might effect fish

wasn't really considered until five years ago, says programme leader Dr Cliff Law - ocean biogeochemistry expert at the National Institute of Water and Atmospheric Research(NIWA).

But research on Australian reef fish showed the larvae of some fish species are affected by low pH. They can lose their sense of direction, be more reckless and lose their sense of risk aversion around predators, programme leader and ocean biogeochemistry expert at the NIWA Dr Cliff Law says.

While the impacts of acidification on shellfish have become much clearer, this came out of the blue," he says.

Various species globally are now being studied, including kingfish larvae at Bream Bay which appear unaffected.

Larval shellfish face difficulties growing their shells, and new research shows mussels may also have problems attaching to rocks. After oyster hatcheries started failing on the Oregon shoreline on the United States west coast 15 years ago, low pH in ocean waters was found to be the culprit.

Cyclic upwelling was bringing nutrients from deep in the ocean to the coast upsetting pH levels in the water. This water was then being pumped into the hatcheries and killing the young shellfish.

Many hatcheries have moved to Hawaii, away from the upwelling. The ones remaining have learnt how to mitigate the worst of the effects and remain viable.

"It would be irresponsible to say New Zealand and shellfish farming won't be affected by climate change," says green mussel expert Norman Ragg with Cawthron Institute in Nelson, "but we are in a strong position."

The experience of the US farmers gives us an extraordinary opportunity to learn and tweak our own commercial operations well ahead of time, he says.

Keeping larvae longer before establishing them in seawater farms, altering the pH of sea water used in the hatchery, and finding and breeding from families of shellfish more resistant to low pH are just some of the options.

Source: Stuff.co.nz http://www.stuff. co.nz/business/farming/ aquaculture/83102158/effectsof-rising-ocean-acidificationon-fisheries-in-spotlight

ORGANIZATIONAL PROFILE

A GIFT for the Caribbean

The Gender III France.

Team (GIFT) is a network he Gender in Fisheries of people interested in gender in Caribbean small-scale fisheries (www.cavehill.uwi. edu/cermes/projects/gift/ overview.aspx). It comprises fisherfolk organization leaders, scientists, NGO staff, intergovernmental organization officers and others. GIFT was formed in January 2016 by the staff of the Centre for Resource Management and Environmental Studies (CERMES) of the regional University of the West Indies (UWI) who were seeking partnerships in applied gender research in fisheries.

Gender has not been high priority in Caribbean fisheries policy, planning or management. Compared to fisheries in other regions, the gender characteristics of the Caribbean are poorly documented. CERMES and partners are conducting applied interdisciplinary research and outreach to better understand gender, and to inform policy and practice concerning small-scale fisheries. The local knowledge of fisherfolk is an important part of the information gathering.

The main objective of GIFT is to facilitate and









support implementation of the Voluntary Guidelines for Securing Sustainable Smallscale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) in the Caribbean Regional Fisheries Mechanism (CRFM) member states. Within the SSF Guidelines, its focus is on the section on gender equality. The CRFM covers 17 small island developing states that also constitute the geographic scope of the Caribbean Network of Fisherfolk Organizations (CNFO).

Initially, GIFT will focus on SSF fisheries value chains and governance arrangements at sub-regional, national and local levels. The approach to gender is concentrating on livelihoods and governance institutions, taking an ecosystem approach to fisheries. Topics such as climate and disasters, along with poverty, food security and other aspects of the SSF Guidelines, are part of the GIFT mandate. Current activities include scoping for secondary data on these topics.

GIFT was represented at the 6th Global Symposium on Gender in Aquaculture and Fisheries (GAF6), held in Bangkok, Thailand, from 3-7 August 2016, and shared findings from a small survey on fisherfolk leaders' perspectives on the gender content of the SSF Guidelines. It found that while fisherfolk leaders admitted to gender inequalities, they said that fisheries were closer to achieving gender equality than the societies in which they were situated. GIFT also provided a regional overview of aspects of gender, based on the secondary data collected.

VERBATIM

Most fish stocks have traditionally been common property which anyone has been free to exploit. In such a situation, no one has a clear incentive to keep the harvest within sustainable limits; a fish spared today is likely to be somebody else's catch tomorrow.

ROGNVALDUR HANNESSON OF
THE NORWEGIAN SCHOOL OF ECONOMICS
AND BUSINESS ADMINISTRATION

FISHERIES OVERVIEW

Food Security and Nutrition

Faced with one of the world's greatest challenges-how to feed more than 9 bn people by 2050 in a context of climate changes, economic and financial uncertainty, and growing competition for natural resources-the international community made unprecedented commitments in September 2015 when $\ensuremath{\text{UN}}$ Member States adopted the 2030 Agenda for Sustainable Development. The 2030 Agenda also sets aims for the contribution and conduct of fisheries and aquaculture towards food security and nutrition in the use of natural resources so as to ensure sustainable development in economic, social and environmental terms.

Many millennia after terrestrial food production shifted from hunter-gatherer activities to agriculture, aquatic food production has transitioned from being primarily based on capture of wild fish to culture of increasing numbers of farmed species. A milestone was reached in 2014 when the aquaculture sector's contribution to the supply of fish for human consumption overtook that of wild-caught fish for the first time. Meeting the ever-growing demand for fish as food in conformity with the 2030 Agenda will be imperative, and also immensely challenging.

With capture fishery production relatively static since the late 1980s, aquaculture has been responsible for the impressive growth in the supply of fish for human consumption. Whereas aquaculture provided only 7 per cent of fish for human consumption in 1974, this share had increased to 26 per cent in 1994 and 39 per cent in 2004. China has played a major role in this growth as it represents more than 60 per cent of world aquaculture production.

Growth in the global supply of fish for human consumption has outpaced population growth in the past five decades,

increasing at an average annual rate of 3.2 per cent in the period 1961-2013, double that of population growth, resulting in increasing average per capita availability. World per capita apparent fish consumption increased from an average of 9.9 kg in the 1960s to 14.4 kg in the 1990s and 19.7 kg in 2013, with preliminary estimates for 2014 and 2015 pointing towards



further growth beyond 20 kg. In addition to the increase in production, other factors that have contributed to rising consumption include reductions in wastage. better utilization, improved distribution channels, and growing demand linked to population growth, rising incomes and urbanization. International trade has also played an important role in providing wider choices to consumers.

Although annual per capita consumption of fish has grown steadily in developing regions (from 5.2 kg in 1961 to 18.8 kg in 2013) and in lowincome food-deficit countries (LIFDCs) (from 3.5 to 7.6 kg), it is still considerably lower than that in more developed regions, even though the gap is narrowing. In 2013, per capita apparent fish consumption in industrialized countries was 26.8 kg. A sizeable and growing share of fish consumed in

developed countries consists of imports, owing to steady demand and static or declining domestic fishery production. In developing countries, where fish consumption tends to be based on locally available products, consumption is driven more by supply than demand. However, fuelled by rising domestic income, consumers in emerging economies are experiencing a diversification of the types of available fish through an increase in fishery imports.

Global total capture

fishery production in 2014 were 93.4 mn tonnes, of which 81.5 mn tonnes were from marine waters and 11.9 mn tonnes from inland waters. For marine fisheries production, China remained the major producer followed by Indonesia, the United States of America and the Russian Federation. Catches of anchoveta in Peru fell to 2.3 mn tonnes in 2014—half that of the previous vear and the lowest level since the strong El Niño in 1998—but in 2015 they had already

recovered to more than 3.6 mn tonnes. For the first time since 1998, anchoveta was not the top-ranked species in terms of catch as it fell below Alaska pollock.

World catches in inland waters were about 11.9 mn tonnes in 2014, continuing a positive trend that has resulted in a 37 per cent increase in the last decade. Sixteen countries have annual inland water catches exceeding 200,000 tonnes, and together they represent 80 per cent of the world total.

Production of aquatic animals from aquaculture in 2014 amounted to 73.8 mn tonnes, with an estimated firstsale value of US\$160.2 bn. This total comprised 49.8 mn tonnes of finfish (US\$99.2 bn), 16.1 mn tonnes of molluscs (US\$19 bn), 6.9 mn tonnes of crustaceans (US\$36.2 bn) and 7.3 mn tonnes of other aquatic animals including amphibians (US\$3.7 bn). China accounted

for 45.5 mn tonnes in 2014, or more than 60 per cent of global fish production from aquaculture. Other major producers were India, Vietnam, Bangladesh and Egypt. In addition, 27.3 mn tonnes of aquatic plants (US\$5.6 bn) were cultured.

An estimated 56.6 mn people were engaged in the primary sector of capture fisheries and aquaculture in 2014, of whom 36 per cent were engaged full time, 23 per cent part time, and the remainder were either occasional fishers or of unspecified status. Following a long upward trend, numbers have remained relatively stable since 2010, while the proportion of these workers engaged in aquaculture increased from 17 per cent in 1990 to 33 per cent in 2014. In 2014, 84 per cent of the global population engaged in the fisheries and aquaculture sector was in Asia, followed by Africa (10 per cent), and Latin America and the Caribbean (4 per cent).

Of the 18 mn people engaged in fish farming, 94 per cent were in Asia. Women accounted for 19 per cent of all people directly engaged in the primary sector in 2014, but when the secondary sector (for example, processing, trading) is included women make up about half of the workforce. The total number of fishing vessels in the world in 2014 is estimated at about 4.6 mn, very close to the figure for 2012. The fleet in Asia was the largest, consisting of 3.5 mn vessels and accounting for 75 per cent of the global fleet, followed by Africa (15 per cent), Latin America and the Caribbean (6 per cent), North America (2 per cent) and Europe (2 per cent).

Globally, 64 per cent of reported fishing vessels were engine-powered in 2014, of which 80 per cent were in Asia, with the remaining regions all under 10 per cent each.

—from The State of World Fisheries and Aquaculture, 2016.

http://www.fao.org/3/ai5555e.pdf

Roundup news, events, briefings and more.

INFOLOG: NEW RESOURCES AT ICSF

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

Publications

FAO. 2016. Climate change implications for fisheries and aquaculture: Summary of the findings of the Intergovernmental Panel on Climate Change Fifth Assessment Report, by Anika Seggel and Cassandra De Young. FAO Fisheries and Aquaculture Circular No. 1122. Rome, Italy.

This report aims to facilitate the use of the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5) by those concerned with the fisheries and aquaculture sector and their dependent communities. The extensive information within the AR5 is condensed from the fisheries and aquaculture perspective, and guiding links to the relevant IPCC documents facilitating further investigation are provided.

FAO. 2016. Fisheries in the drylands of sub-Saharan Africa—"Fish come with the rains". Building resilience for fisheries-dependent livelihoods to enhance food security and nutrition in the drylands, by Jeppe Kolding, Paul van Zwieten, Felix Marttin and Florence Poulain. FAO Fisheries and Aquaculture Circular No. 1118, Rome, Italy,

The focus of this review is to both document the general resilience of many fish resources to climatic variability—including their underestimation in livelihood importance, particularly in protracted crisis situations—and to enhance the potential supply of fish from dryland areas through improved use of the available water bodies, and in particular small reservoirs. The important role that small water bodies play in supplying essential micronutrients and protein to rural communities has largely been overlooked since the termination of the FAO/ALCOM (Aquaculture for Local Community Development) programme in 1998, although they are more productive on a per unit area basis than the large lakes and reservoirs and, when pooled, constitute a much larger area of water.

Taylor, W. W., D. M. Bartley, C. I. Goddard, N. J. Leonard, and R. Welcomme, editors. 2016. Freshwater, fish and the future: proceedings of the global cross-sectoral conference. Food and Agriculture Organization of the United Nations, Rome; Michigan State University, East Lansing; American Fisheries Society, Bethesda, Marvland

http://www.fao.org/3/a-i5711e.pdf

The purpose of this book, and the global conference (www.inlandfisheries.org), is to elevate the significance of freshwater fisheries throughout the world so that fishery managers and the people that depend on freshwater fisheries will have a voice when policymakers make decisions that impact their viability and productivity.

Videos

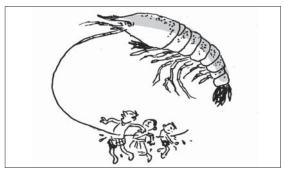
Implementation of the SSF Guidelines

New Delhi workshop, Videos of presentations/discussions https://www.youtube.com/watch?v=8BtS76s5rvQ&app=desktop https://www.youtube.com/watch?v=tnMBWxIDS9Q& feature=youtu.bePesca Vital: Diretrizes Internacionais para a Valorização da Pesca Artesanal

FLASHBACK

Time to shift gear

nly three per cent of global aquaculture production comes of from the Penaeus species—the backbone of the shrimp aquaculture industry. Yet, culturing these species has posed some of the greatest threats to the coastal communities in Asia and Latin America, so much so that it has been nicknamed the 'rape and run' industry. Fishing communities, in particular, have been very concerned with its negative impacts. These include the destruction of fish larvae and removal of gravid females, the obstruction of fishing operations by coastal installations, and the fishermen's loss of access to the fishing ground from the landward side.



For the coastal communities, there are additional problems like the depletion and contamination of ground water, loss of access to the village commons, and incursion of salinity into the paddy fields. Further, the loss of mangrove cover has several particularly negative implications. These problems were making life almost impossible for the coastal communities in countries like India, Bangladesh, Ecuador and Thailand, especially in the past five to 10 years. The severity of these problems has been compounded by the lack of proper legal and management regimes, and the existence of rampant corruption in administration.

In this context, the judgement delivered by the Supreme Court of India—the highest court of the country—striking down all brackish water operations within 500 m of the high tide line is quite a significant landmark, as pointed out by several articles in this issue of SAMUDRA. The judgement is, perhaps, the one with the greatest impact on the shrimp aquaculture industry anywhere in the world.

We hope the Indian Supreme Court judgement will mark the beginning of a defining shift from feed-intensive, carnivorous, monoculture systems of aquaculture that are clearly unsustainable, to the freshwater polyculture systems for herbivorous and omnivorous species, dependent on locally available nutrient inputs.

— from Comment in SAMUDRA Report No. 17. March 1997

ANNOUNCEMENTS

MEETINGS

Second Session of the **Preparatory Committee** established by the UN General Assembly resolution 69/292:

Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction 26 August to 9 September 2016, New York (2 weeks)

IUCN World Conservation Congress

1 - 10 September 2016, Hawaii

Decent Work for Blue Growth: **Towards Social Responsibility** in the Fish Business The Vigo

Dialogue on decent employment in fisheries and aquaculture which will be held again in Vigo on 4 October 2016, on the occasion of the Conxemar International Frozen Seafood Exhibition and the World Congress on Cephalopods, Vigo, 3 - 6 October 2016

13th meeting of the Conference of the Parties to the Convention on Biological Diversity

4 - 17 December 2016,

WEBSITES

The Asia Floor Wage Alliance is a global coalition of trade unions, workers rights and human rights organizations

http://asia.floorwage.org/

Rome Declaration launches international cross-sectoral effort for responsible inland fisheries

http://inlandfisheries.org/

Global Conference on Climate Change Adaptation for Fisheries and Aquaculture

http://fishadapt.com/modules/conference/

Engendering Security in Fisheries and Aquaculture, Symposium on Gender in Aquaculture & Fisheries

https://genderaquafish.org/2016-gaf6august-bangkok-thailand/gaf6-themes/



Endquote

Sandcastle

n an empty beach in sunlight I built my castle the wind was my architect together we sculpted soft curves from the dunes I found ribbons of seaweed sprawling like handwriting *in the tideline of debris* washed from the sea of knowledge with these I garlanded the walls I made a roof from shells that giggled stories about crabby hermits and boring barnacles someone has spilt black tar on my castle ink black sticky stains that burn where they touch me that burn

—Gabriellr Maughan

