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SAMUDRA REPORT

THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS

Fisheries, Communities, Livelihoods

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JACKIE SUNDE

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THE TRIANNUAL JOURNAL OF THE INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS

NO.66 | DECEMBER 2013

VISHNU NARENDRAN / ICSF

FRONT COVER

A Fishing Angel
Painting by Mariaan Kotze
Photo by Amiene van der Merwe

www.mariaankotzeart.co.za

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BACK COVER

Don Trino from Cabuya, Costa Rica, bringing home his daily catch
Photo : CoopeSoliDar R.L.

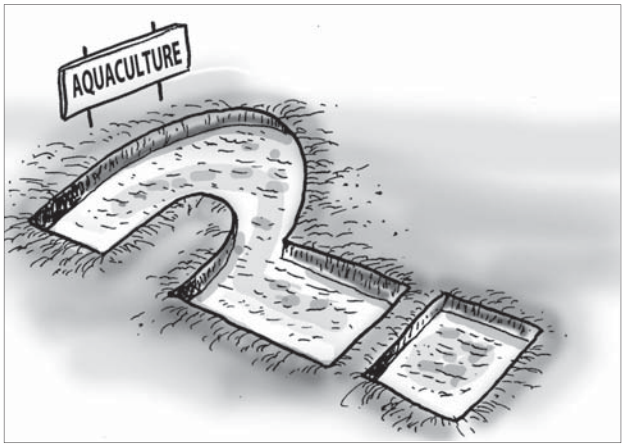
SAEED KHAN / FAO

A scene from a fish farm cage in Mae Nang Khao Village, Thailand

Aquaculture with a Human Face

Strategies to promote aquaculture globally should shun corporate-driven agendas and focus instead on sustainability, food security and human rights

Aquaculture now accounts for 48.6 per cent of fish produced for human consumption globally. It is the fastest-growing food-production sector, with an annual growth rate of about 6.5 per cent. However, trends indicate a gradual decline in this rate, which could, by 2030, dip to around four per cent. But to meet the growing global demand for fish, it is estimated that aquaculture production would need to grow by 5.6 per cent annually. There are also regional imbalances in world aquaculture production, with Asia accounting for most of the output.



Noting this scenario, at the Seventh Session of the Sub-Committee on Aquaculture (SCA) of the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO), held at St Petersburg, Russia, in October 2013, over 50 countries endorsed a Global Aquaculture Advancement Partnership (GAAP) programme to bring together a broad range of public- and private-sector stakeholders to find sustainable solutions for the problems in the sector.

GAAP is expected to review constraints to growth in aquaculture, and contribute effectively to help eliminate poverty, food insecurity and malnutrition by supporting partnership-based initiatives, which will lead to sustainable increases in aquaculture production.

The programme is mooted to be consistent with the strategic objectives of FAO, which include eradication of hunger, food insecurity and malnutrition; increasing and improving the provision of goods and services from agriculture, forestry and fisheries in a sustainable manner; and reducing rural poverty.

As such, even as partnerships to boost production in the aquaculture sector multiply and gain support, and as efforts to enhance investment in aquaculture, promote foreign direct investment, joint ventures and public-private-partnerships gain ground, some fundamental questions must be raised. What forms of aquaculture have contributed to the food-security and nutritional requirements of the world's needy populations? Who has benefited from the boom in export-oriented forms of intensive aquaculture? What kinds of employment opportunities and working conditions have been created? Is farmed-fish produced by large-scale aquaculture nutritionally at par with wild-caught fish? Is an overarching emphasis on production justified?

An evidence-based exploration of such issues, with inputs from local communities, would provide important guidance and help avoid the severe social, environmental and economic problems that aquaculture has caused in some parts of the world. In countries like Chile, Ecuador, Bangladesh and Thailand, for example, such problems include the loss of biodiversity, introduction of alien species, spread of disease and pollution, usurpation of community resources and rights, food insecurity, and other forms of severe violations of human rights.

It is imperative, therefore, that efforts to enhance aquaculture in the future—including through partnerships formed and resources mobilized—avoid such mistakes. They must be rooted within a human rights and sustainable-development framework, balancing economic, social and environmental aspects. Interventions must contribute directly to food security, nutrition and poverty alleviation, and to improved labour conditions and social protection for workers in the sector.

Small-scale, low-input forms of aquaculture that are locally owned, and that help in creating and sustaining livelihoods of riparian communities (especially in remote rural areas with few other employment opportunities), and in meeting nutrition- and food-security needs, must be prioritized and supported. Such partnerships must not be allowed to become a trojan horse to promote corporate-driven agendas that undermine biodiversity and human-rights imperatives.

COFI would do well to bear these concerns in mind when the report of the SCA comes up for discussion and adoption at its next session.

Tuna Tuned Out?

As concern grows over overfishing of albacore in the Indian Ocean, there is need to control small tuna longline vessels

Albacore has been mostly used for processed can products but eating it raw as *sashimi* has become very popular in recent years. In fact, Japan's import of albacore has increased rapidly as the demand for albacore *sashimi* and *sushi* grows. In analyzing the background of this phenomenon, it becomes clear that increase of albacore supply has been caused by small tuna longline vessels, mostly below 24 m in total length.

I have noticed a rapid and substantial increase in the catch of albacore by Indonesia in recent years. I felt curious about this phenomenon because I had thought Chinese Taipei is the dominant country catching albacore in the Indian Ocean, although its fleet targets bigeye tuna. My doubts were confirmed at the annual meeting of the Indian Ocean Tuna Commission (IOTC) held last May in Mauritius where serious arguments over the management of albacore stocks were reported.

A significant reduction in tuna fishing activities in the western part of the Indian Ocean has been attributed to piracy off Somalia...

A significant reduction in tuna fishing activities in the western part of the Indian Ocean has been attributed to piracy off Somalia, forcing longline fishing vessels to shift their fishing grounds to the Southern Indian Ocean. Their target fish has changed to *sashimi*-grade albacore and thus the catch amount has increased rapidly. There was another fact causing increase of albacore catch. In the past, albacore in the Indian Ocean was exploited almost exclusively by large longline vessels, particularly by Chinese Taipei vessels. However, Indonesia, which uses mostly small longline vessels, remarkably increased its catch of albacore in recent years, even slightly exceeding that of Chinese Taipei for some years.

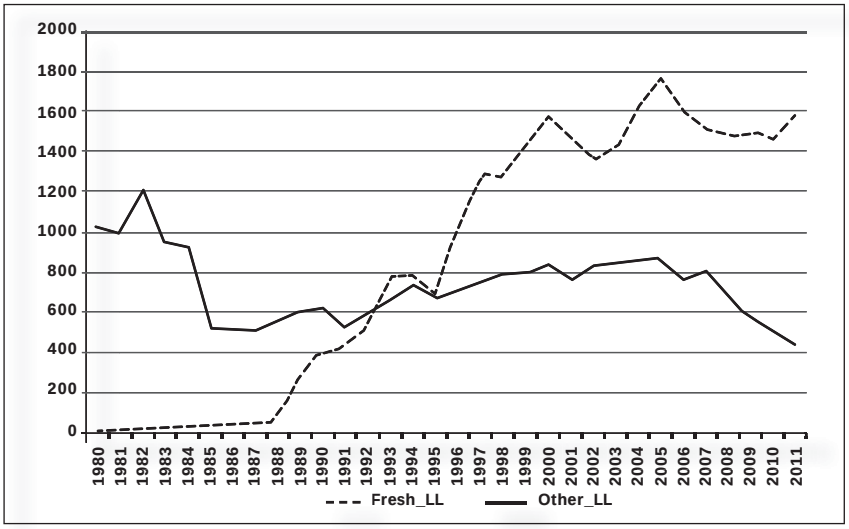
The Scientific Committee (SC) of the IOTC recognized that overfishing of the albacore stock is occurring and recommended a reduction in the catch by 20 per cent. However, Indonesia argued that its catch is much less than the figures used in the stock assessment. The arguments forced the Commission to have the SC conduct a stock assessment again next year and the management measures will be considered based on the new assessment.

I personally doubt the accuracy of the catch statistics of Indonesia. In addition, I found the trend of abundance indices used in the assessment differing among the major longline fishing countries, especially in recent years. In my view, since the size of fish taken by longline vessels is similar, the indices should show a similar trend for the longline vessels of major countries. Both the catch statistics and the interpretation of different trends in recent abundance indices should, therefore, be carefully reviewed in order to assess the stock status more certainly.

Fishing mortality

If albacore stock is really declining, its main cause would be excessive fishing mortality and may be significantly due to the increase in the number of small longline vessels. In fact, the number of small longline

*This article, by tuna biologist **Ziro Suzuki** (zsuzuki@affrc.go.jp), is based on earlier pieces on the subject published in the OPRT Newsletter Nos. 37 and 45 (http://oprt.or.jp/eng/oprt-news-letter/)*



Number of longline vessels in the Indian Ocean showing rapid increase of fresh-fish longline vessels (small longline) and decrease of other longline vessels (large longline)
Source: M Herrera, Data Manager, IOTC

vessels has rapidly increased and they now far outnumber the large longline vessels.

This seems to have occurred through improvement in the fishing efficiency and the economic competitiveness of small longline vessels, as explained later in this article. The increase of the number of small longline vessels seems not to be well recognized by the IOTC but it should start to seriously consider taking measures to control the fishing capacity of the small longline vessels in order to ensure the sustainability of the albacore fishery and the stock in the region.

In the South Pacific Ocean, a similar story, of increased small longline vessels accounting for the bulk of the albacore catch, is being played out.

In the South Pacific, almost all albacore tuna (apart from small amounts taken by troll vessels) are caught by longline fishing vessels, focusing on large-size adult fish. The catch began to increase from the 1990s, with major fishing grounds being in the area 10S-20S, 160E-160W, which includes Fiji, Samoa and Cook Islands. The overall catch in recent years from the South Pacific (south of the equator) has been about 90,000 tonnes, half of which is caught by Chinese Taipei and Chinese longline fishing vessels, and the other half by vessels from the South Pacific island countries. For the South Pacific island countries, albacore fishery is a genuine domestic longline fishery developed by their own effort mostly, and thus very important for the island countries' economies. However, China has emerged rapidly as the largest harvester of South Pacific albacore, exceeding, for some recent years, Chinese Taipei that was traditionally the largest harvester. The bulk of the catch is exported to foreign countries for *sashimi* and canned tuna materials.

It is the view of the Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee that the South Pacific albacore stock is

ZIRO SUZUKI

A small Chinese longline boat unloading its catch in Ponpei in the Federated States of Micronesia

considerably robust against fishing pressures and the current catch is sustainable and overfishing is not occurring, partly because of selective fishing operations by longline fishing that aims to catch matured, large-size fish. The maximum sustainable yield (MSY) is estimated at approximately 100,000 tonnes, the level of the latest catch.

However, its biomass and longline catch per unit effort (CPUE) show continued decline, falling to nearly half of the early state of exploitation. This is a serious economic concern for the developing island countries that target albacore. Based on the recommendation of its Scientific Committee, the WCPFC introduced regulatory measures not to increase the number of fishing vessels actively catching albacore for the Western and Central Pacific Fisheries Convention areas south of 20S from the 2000-2004 or 2005 level in order to ensure stable development of fisheries. But the number of longline vessels has increased to a record high, mostly due to small longline vessels. It seems that this simple control of the number of fishing vessels is inadequate because fishing efficiency and catch transport capability of the fishing vessels have been considerably improved as explained in the following paragraphs.

...the number of the transport boats worldwide for sashimi-grade tunas has been decreasing recently...

Conventionally, the size of the majority of small-scale longline fishing vessels was less than 50 gross tonnes, and the catch used to be stored in ice. The fishing operation period lasted around one month, and the catch per fishing period was about five to 10 gross tonnes, with the main targets being yellowfin and bigeye tuna. On interviewing an executive of the Chinese company that operated the Chinese fleet, and observing the vessels landing their catch in Micronesia a few years algo, I was told that the company intends to convert the vessels from ice-storing type into freezing vessels.

With regard to Chinese Taipei small-scale longline fishing vessels, Chinese Taipei's report to the WCPFC in 2008 indicated that the overall number of vessels was 1,750. The report said that some of those vessels were already equipped with freezing facilities. I assume that the transition from ice-storing vessels into freezing vessels has advanced further in recent years.

There is information that 50-60 ice-storing small-scale longline fishing vessels are being reformed into freezing vessels in Chinese Taipei recently. Furthermore, it appears that low-priced fibre-reinforced plastic (FRP) fishing vessels having super-low-temperature fish holds are being constructed in Chinese Taipei and other countries as well. It seems that these small-scale longline fishing vessels will actively participate in the albacore fishery—a type of fishery outside the current WCPFC regulations.

The following is the fishing capacity of small-scale longline fishing vessels (90-150 gross tonnes) in recent years: Number of hooks: 3,200 hooks/day. Freezing capacity: 1.5-2.5 tonnes/day. Fish hold capacity: 60 tonnes.

Thus it is probable that the fishing capacity of small-scale longline vessels is now comparable to that of large-scale vessels.

Transportation

The catch of tuna longline fishing vessels operating in distant areas used to be shipped by transport boats. But the number of transport boats worldwide for *sashimi*-grade tunas has been decreasing recently. It appears that only about 20 are now operating—a sharp decrease from about 70 in the peak period. The major cause of the decrease seems to be the drop in transported volume due to tightened fishing regulations. On the other hand, transportation of tuna in super-low-temperature containers (minus 35 to minus 60 degrees centigrade) seems to be increasing. Details of the actual status, including

quantities, are not available. It is said that a freezing container has similar advantages while its transportation costs are more or less the same as that of a super-low-temperature transport boat, and it is capable of transporting small-lot cargoes of about 24 tonnes, and the catch can be transported by ordinary container vessels. The development of freezing-container transportation made it possible to transport the catch of small-scale longline fishing vessels easily, resulting in their higher profitability.

In general, management of small longline vessels (less than 24 m in length) has been a rather low-key issue hidden under the focus given to the management of large longline vessels. However, in view of the facts reported above, concern is rising in the Indian Ocean and also in the South Western Pacific about the increase of the number and capacity of small longline vessels. I think the regional fisheries management organizations (RFMOs) and their parties should now pay more attention to the impact on tuna resources. I should point out that the impact of the unlimited expansion of small longline vessels is not only on albacore but also on yellowfin and bigeye tuna.

BY SPECIAL ARRANGEMENT

A container with ultra-deep freezer capable of maintaining temperatures of upto minus 60 degrees centigrade

For more

www.iotc.org
Indian Ocean Tuna Commission (IOTC)

www.wcpfc.int/
Western and Central Pacific Fisheries Commission (WCPFC)

oprt.or.jp/eng/
Organization for the Promotion of Responsible Tuna Fisheries

Decent Work, Decent Fishing

The issues of decent work, fisheries management and IUU fishing can be resolved through the ILO Work in Fishing Convention, 2007

The term "decent work" has been used by the International Labour Organization (ILO), the United Nations (UN), the Food and Agriculture Organization of the UN (FAO) and the European Union (EU) in recent years in relation to the rights of workers. "Decent work" is considered by the ILO as work which complies with its core fundamental principles, which have been included in a number of ILO Conventions and Recommendations since 1919. The ILO Work in Fishing Convention, 2007 (C. 188) has brought together all those principles in a single document.

The concept of decent work is enshrined in the ILO Constitution of 1919 and in several other international documents...

Illegal, unreported and unregulated (IUU) fishing has long been recognized as a major threat to fish stocks, marine ecosystems and the conservation and management measures adopted at national, regional and international levels. It has had a detrimental effect on many small fishing communities throughout the world. In 2001 the International Plan of Action (IPOA) on IUU fishing was adopted by the FAO's Committee on Fisheries (COFI) in order to prevent, deter and eliminate IUU fishing.

The management of fishery resources has three dimensions; while there has been excessive focus on the first two, namely, resources and the legal frameworks, the third dimension, that is, the fishworkers, has been completely ignored.

A recent study carried out by UILApesca, the leading Italian trade union representing fishworkers, suggests that there is a clear and undisputed link between IUU fishing and decent work. The offence is committed by fishworkers and, therefore, there must be more studies to find out the reasons for such widespread law-breaking. It is argued that if fishworkers are adequately protected by law, there will be a substantial reduction in IUU fishing both within the exclusive economic zones (EEZs) and on the high seas.

The UN, FAO, ILO, coastal States and regional fisheries management organizations (RFMOs) can play a significant role in combating IUU fishing through promoting decent work in the fishing industry. This can be achieved by securing the protection of fishworkers' rights according to the provisions of the ILO Work in Fishing Convention, 2007 and by promoting the ratification and the entry into force of the Convention.

The concept of decent work is enshrined in the ILO Constitution of 1919 and in several other international documents, including the Declaration of Philadelphia (1946), the Universal Declaration of Human Rights (1948) and the International Covenant on Economic, Social and Cultural Rights (1966). In particular, Article 7 of the 1966 Covenant stresses the right of everyone to the enjoyment of just and favourable conditions of work.

Fair wages

The workers should, *inter alia*, receive fair wages and equal remuneration for work of equal value, a decent living for themselves and their families, safe and healthy working conditions, rest, leisure and

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reasonable limitation of working hours and periodic holidays with pay. And, according to Article 8, they have the right to form trade unions and join the trade union of their choice. States should recognize the right of trade unions to establish national federations or confederations and the right of the latter to form or join international trade-union organizations.

The term "decent work" was introduced by the Director General of ILO as the "core activities" of the organization in 1999. In his report to the 87th Session of the International Labour Conference in 1999, the Director General stated that the primary goal of the ILO is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity. The report stated: "Decent work is the converging focus of all its four strategic objectives: the promotion of rights at work; employment; social protection; and social dialogue. It must guide its policies and define its international role in the near future."

Since then, many references to decent work have been made in UN documents, including the Millennium Declaration of 2000 (Paragraph 20: "We also resolve to promote gender equality and the empowerment of women as effective ways to combat poverty, hunger and disease and to stimulate development that is truly sustainable and to develop and implement strategies that give young people everywhere a real chance to find decent and productive work."); The World Summit outcome of 2005; and the Rio+20 Declaration "The Future We Want" of 2012.

There are also a number of references to decent work in EU documents, such as "Promoting Decent Work for All: The EU Contribution to the Implementation of the Decent Work Agenda in the World" and "Council Conclusion on Decent Work for All".

In 2007, ILO adopted the Work in Fishing Convention (C. 188), which explicitly aimed at introducing decent work in the fishing sector by providing, for the first time, a comprehensive framework within which the rights of fishworkers are properly recognized and protected.

The management of fishery resources is a triangle, each point of which represents an important component of management: the fishery resources; the States and RFMOs; and the fishermen. So far, almost all the attention has been focused on the first two, ignoring the significance of the link between the resources and the fishermen. The importance of this relationship has been mentioned in a number of international instruments, including:

- the 1984 FAO Conference on Fisheries Management;
- the FAO Code of Conduct for Responsible Fisheries, 1995; and
- the FAO Committee on Fisheries (COFI) meetings in 2007 and 2009.

The 1984 FAO Conference on Fisheries Management stated: "The co-operation and participation of fishermen is necessary to ensure the success of small-scale fisheries management schemes. Fishermen's organizations should be considered as a channel through which management decisions can become operative..."

Article 6 of the FAO Code of Conduct for Responsible Fisheries, while dealing with General Principles, states that "effective participation

UILAPESCA

Fabrizio De Pascale, National Secretary of UILApesca, speaking at a conference on IUU fishing and decent work in Mazara del Vallo, Sicily

of fishworkers and others…in decisionmaking with respect to the development of laws and policies related to fisheries management, development, international lending and aid". Article 6.17 urges States to ensure "all fishing activities allow for safe, healthy and fair working and living conditions". According to Article 8.1.5: "States should ensure that health and safety standards are adopted for everyone employed in fishing operations. Such standards should be not less than the minimum requirements of relevant international agreements on conditions of work and service."

The most serious problem facing the management of the fishery resources is IUU fishing...

In 2007, COFI made the following references to decent work: "The promotion of human rights is critical for the social development of fishing communities. These rights include legally mandated rights to decent working conditions..."

In 2009 COFI stated: "FAO and ILO should give priority to ensure decent working and living conditions in small-scale fisheries and seek that the relevant ILO conventions are applied, especially the 2007 Work in Fishing Convention (C. 188). It was also suggested that the working conditions in each country be analyzed and minimum goals be established that can be subject to regular monitoring and reporting".

The most serious problem facing the management of the fishery resources is IUU fishing. In the past 10 years, international authorities, including the UN, FAO, ILO, International Maritime Organization (IMO), the EU and RFMOs have come together to develop and adopt policies and legal instruments to combat IUU fishing. While international efforts continue to focus on ways by which IUU fishing is prevented, reduced and eradicated, the relationship between the fishworkers who carry out the offence and IUU fishing has been largely overlooked.

The direct link between IUU fishing and decent work in the fishery sector was made in 2000 by the ILO representative to the FAO/IMO Ad Hoc Working Group on IUU Fishing. In his representation, he related the issue of IUU fishing to the context of the ILO's Decent Work Agenda. Workers in the fishing sector were entitled to decent work, no matter what size the vessel, where it operated or what flag it flew. There was a need to consider the human dimension of fishing, especially the abuse of crew and unsafe crew conditions. The paper concluded by making recommendations that would address the "human" aspect of IUU fishing.

Specific reference to IUU fishing and fishworkers' rights and conditions of work are also contained in a number of EU documents, including:

- EU Commission Communication 2007 (COM 601) on a new strategy for the Community to prevent, deter and eliminate IUU fishing
- Council Decision (2010/321/EU)
- 2011 EU Parliament: Motion for a Resolution by the European Parliament on combating illegal fishing at the global level—the role of the EU

In 2010, the EU Council authorized Member States to ratify the ILO Convention, 2007 (C. 188). An agreement to implement into an EU directive the content of the Convention was concluded between the European Transport Workers Federation (ETF) and the Association of National Organizations of Fishing Enterprises in the European Union (Europêche) and the General Federation of Agricultural Co-operatives in the European Union (Cogeca), 2012. It was stated: *"Together with the Social Partners' Agreement, we have signed yesterday on the proposal to transpose the ILO Work in Fishing Convention into EU law..."*

Fishworkers' rights

The relationship between the rights of fishworkers and fisheries

management was analysed in an article in *SAMUDRA Report* No. 61 of March 2012. In February 2012, the Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean Sea (GFCM) made a historic decision by approving a proposal made by its Sub-Committee on Economic and Social Sciences (SCESS) earlier that year to collect, study and analyze the national legislation of its members in relation to the rights of fishworkers. (The decision was made after the presentation to the SCESS by the UILApesca representatives on the report which had been carried in 2010. The report was a study on the "Development of Co-operation in the Mediterranean Fishery Sector: World of Labour, Producers' Organizations, Consumers' Associations and Training (PESCAMED)". The study included analysis of fishworkers' rights in 10 Mediterranean countries.

In November 2012 UILApesca organised a conference on IUU fishing and decent work in Mazara del Vallo, Sicily, which was attended by Italian officials as well as a number of non-governmental organizations. Representatives from FAO and the EU were present and made important contributions to the proceedings. Messages from Brandt Wagner of ILO and Guido Milana, vice-president of the EU parliamentary commission on fisheries, were transmitted to the conference.

The conference presented a study on the rights of fishworkers in the context of decent work and its relation to IUU fishing. It was strongly argued that IUU fishing, particularly in small-scale fisheries, would be substantially reduced if the rights of fishworkers were properly acknowledged and the Work in Fishing Convention (C. 188) was adopted and its provisions implemented. Many fishworkers would not want to risk losing their rights and benefits by engaging in IUU fishing.

The study by UILApesca was presented to the participants at the 13th Session of the SCESS held in Rome in February 2013. It was argued that the subject of IUU fishing and decent work were of particular practical importance in relation to the terms of reference of the Sub-Committee.

After a long discussion, the SCESS recommended that, subject to approval by SAC, a study on this subject should be carried out and presented to the GFCM's 36th annual meeting in Split, Croatia, in May 2013. After extensive discussions, a number of recommendations were put forward for the SAC's approval. One such recommendation was to carry out a study on the relation between decent work and the principles included in the ILO Work in Fishing Convention 2007, and IUU fishing. Unfortunately, SAC did not approve the study although the issue remains on the table for the next meeting of the SCESS.

In February and May 2013 UILApesca, together with Fai-Cisl and Flai-Cgil (two other Italian trade unions), requested that the item concerning the relation between IUU fishing and decent work be included in the programme of work of the ETF and of the European Social Dialogue on Fisheries.

In May 2013, the Global Dialogue Forum for the Promotion of the Work in Fishing Convention 2007 (C. 188) was held at the International Labour Office in Geneva. Specific reference was made in the background documents to the UILApesca report, and an item concerning the relationship between IUU fishing and decent work was included in the agenda of the meeting.

It was strongly argued that IUU fishing, particularly in small-scale fisheries, would be substantially reduced if the rights of fishworkers were properly acknowledged...

Website

The meeting reached a number of Points of Consensus. In July 2013, the UILApesca website on "IUU fishing and decent work" was linked to the joint webpage ITF/IUF on IUU fishing.

BY SPECIAL ARRANGEMENT

A crew member of a South Korean fishing vessel in the waters off New Zealand. The concept of responsible fishing should include respect for fishworkers' rights

In the light of the discussions and the available documents, there exists a strong legal basis and historic conditions to propose a linkage between the fight against illegal fishing and decent work in the fisheries sector. This link should be based on, or at least include, an association between the fight against IUU fishing and ILO's Work in Fishing Convention, 2007, as suggested by the European Parliament in 2011. The provisions of the ILO Convention, 2007, are what amounts to "decent work".

It has also been argued that the meaning of illegal fishing should be extended to include any fishing activities which are carried out without proper social protection and work contracts, a situation which clearly violates workers' rights. Similarly, it is further argued that the concept of responsible fishing should include respect for fishworkers' rights and their social protection.

Finally, it is suggested that the definition of IUU fishing should be expanded to include the employment of, and fishing operations by, fishworkers who do not have proper documentation to ensure that their rights are properly protected according to the provisions of the 2007 Convention.

The promotion of these ideas should come from FAO's COFI as the only specialized global forum where major international fisheries and aquaculture problems and issues are examined.

At the same time, RFMOs can play an important role by requesting their members to apply the provisions of the ILO Work in Fishing Convention, 2007, to their fishworkers, and act to quickly ratify it.

For more

www.lavorodignitoso.org/acm-on-line/Home/News/articolo18013820.html
Global Dialogue Forum for the Promotion of the Work in Fishing Convention, 2007 (C. 188), GDFWF/2013/8

www.itfglobal.org/fisheries/IUU_fishing.cfm
Combating IUU Fishing

www.uilapesca.eu/public/eventi/20121201/imm/pdf/Uilapesca%20Report%202012.11%20EN.pdf
IUU Fishing and its Relation to the Rights of Fishworkers in International Law

A Dam Good Option

Small-scale fishing in the reservoir of the Dimbhe dam in Maharashtra, India, has been a boon for displaced families

In 2000, the Dimbhe dam in the Indian State of Maharashtra became operational, flooding 2,202 ha of tribal land and displacing 1,253 families. Eleven villages were submerged and 13 partially affected to irrigate 36,552 ha of land through the Right Bank and Left Bank canals and produce five mw of power. The remaining water is supplied to the Yedgaon dam. The families who have had to shift to the hill upstream have little livelihood options on the stony slopes. Twenty-five to 40 of the families took to fishing in the reservoir, using rubber tubes of truck tyres. But their meagre catch was inadequate for their own nutrition, let alone as a source of livelihood.

Enter the non-profit, Shashwat. The organization worked to help local communities develop small-scale fishing activities in the reservoir and improve agricultural production while conserving forests. Shashwat's holistic development plan for the area includes enabling communities to not only start small-scale livelihood activities such as fishing in the reservoir, but also enabling them to manage resources sustainably. Shashwat was awarded the Equator Prize as well as the prestigious Special Recognition Award for Freshwater Resource Management by the Equator Initiative of the United Nations Development Programme (UNDP) at the RIO+20 United Nations Conference on Sustainable Development at Rio de Janiero, Brazil, on 20 June 2012.

Shashwat helped the tribals of 19 villages living around the dam organize themselves and develop fishing in the reservoir. In 2003, with advice from fishers of the Bargi Dam Displaced and Affected People's Association, some 900 km away in the neighbouring State of Madhya Pradesh, the Dimbhe community formed an association, which was later registered as a co-operative society in 2006, with 157 members, including 15 women. Membership to the Dimbhe Jalashay Shramik Adivasi Machhimar Sahakari Society Maryadit was based on payment of a token fee. The co-operative has members from all 19 villages around the reservoir. Soon after the formation of the association, three boats made of galvanized iron sheets fixed over wooden frames were introduced in 2003. These were a hit. Today there are some 150 such boats plying the reservoir waters.

The families who have had to shift to the hill upstream have little livelihood options on the stony slopes.

Training programme

The next step was to get the State agencies on board. The revenue, fisheries, co-operation, irrigation, tribal and forest departments needed to be involved. The Tribal Development Department provided funds for the training-cum-production programme of making boats and purchasing fishing nets, while the Fisheries Department subsidized the boats made by the co-operative's members, and helped the women get trained in ornamental fish culture. The

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Revenue Department pitched in by giving ration cards to access food subsides, and the Irrigation Department reduced its charges for draw-down irrigation permits, among others.

In the first two years of the dam's existence, the Irrigation Department emptied the dam twice, leading to the death of all the fish in the reservoir. Then, in 2003, the reservoir was given to a private contractor for fishing, for a period of five years. The contractor did not stock the reservoir adequately and when it was time to harvest the fish, he brought in fishers from outside the State. The Dimbhe tribals protested against that step. In addition, the private contractor, it was found, had violated contractual conditions. This led to the Fisheries Department cancelling his contract in June 2006.

...on the ground, experience has found that such small fingerlings have a survival rate of just 10-15 per cent once released into such a large reservoir (average area: 1,278 ha).

Following the protest against the private contractor, the Fisheries Department offered the co-operative the fishing contract. The co-operative, with difficulty, collected about two-thirds of the money required, from the entrance fee of Rs201 (1 US$ =Rs61.6) and the fee for extra shares (Rs800) collected from members.

The contract was valued at Rs157,360, which included a security deposit of Rs36,360. For the rest, with Shashwat's help, a zero-interest loan of Rs50,000 was secured. Once the contract was awarded, the co-operative tackled the problem of stocking the reservoir.

Using grants from the tribal development department and SWISSAID, the reservoir was stocked with 909,000 fingerlings. This first attempt by the co-operative at stocking the reservoir was, however, a long-drawn affair as the Fisheries Department took three years to supply all the fish seed.

In the first year, 2006-2007, the catch was 3,670 kg of *catla* (Indian carp) and 16,860 kg of *chela* (Indian glass barb) in 72 fishing days. The catch has seen ups and downs, including a low total catch of 6,625 kg in 2010. In 2012-2013, the catch had increased to 31,117 kg while the fishing days had gone up to 290 days.

Indian major carps form the bulk of the catch as a result of the aggressive stocking of these, as recommended by the Central Institute of Fisheries Education (CIFE). In 2007, the community also undertook cage culture of carps. CIFE again came to the aid of the co-operative, providing them with floating cages as well as the necessary technical advice and training. The contract required the co-operative to stock the reservoir with 900,000 fingerlings (25-35 mm in size) annually.

However, on the ground, experience has found that such small fingerlings have a survival rate of just 10-15 per cent once released into such a large reservoir (average area: 1,278 ha). The cage culture meant the co-operative could fulfil this condition, in spite of setbacks ranging from loss of fish seed to breakage of equipment and lack of training and proper equipment. Later, CIFE provided 16 more cages. Most of the stocking done in Dimbhe since then has been with advanced fingerlings of size 100-150 mm, which increases the survival rate to 85-90 per cent.

Self-help groups

The tribal women, having formed 32 self-help groups (SHGs), were looking for a means to enhance their livelihood. They approached CIFE which suggested ornamental fish culture. The women were trained in such culture and began to rear goldfish. The National Fisheries Development Board (NFDB) has recently sanctioned 16 cages for a two-year project through CIFE in which the women are given training in ornamental fish rearing. NFDB has also provided 32 cages for the fishers to rear fingerlings for stocking the reservoir.

By 2008, the women had formed a federation of 29 SHGs named Ghod Bubra Mahila Sangh.

Between 2009 and 2012, the community and Shashwat also tried their hand at pen culture but with mixed results. In 2009, Bendharwadi village was the site of this experiment where a four-m-high nylon net was tied across a depression in the fields at the reservoir's edge. The net was supported by bamboo and wooden poles. When the water level rose, and water entered the penned area, 33,000 fish seed were released. Unfortunately, that year the dam did not fill to capacity so the water level in the pen was just two to three feet. The water level then dipped further as water was released for irrigation, giving the fish seed hardly 21 days to grow. The slightly larger fish seed of up to 70 mm size were then released into the reservoir. In the next year, the dam water overtopped the pen at Savarli by about 30 cm for two to three days. The community has, thus, found that though pen culture is cheaper than cage culture, there is an element of uncertainty since the water levels are unpredictable.

The co-operative reserves 25 per cent of the catch sales for local vendors as a means to ensure the local community's nutrition needs are met. The rest is sold to the wholesale buyer who now comes to the dam site to buy the catch. Payment to the fishers is made weekly on Sundays. To ensure transparency, fishers from the villages share the responsibility of checking accounts, and someone is always present when financial transactions are made. The co-operative also has regulations on mesh size and closed seasons, which are zealously enforced. There have been cases of nets being confiscated and fines imposed on erring fishers. The members of the co-operative also made a resolution way back in 2003 not to use poisons or explosives for fishing.

In Maharashtra, the offset price for fishing lease of a reservoir is decided by the estimated annual fish production, the market rate of fish (Rs25/kg, according to the government), and a percentage of the total value of fish production (one per cent, as decided by the State). In 2005-06, the offset price for Dimbhe was fixed at Rs54,000. The next year it had jumped to Rs121,000. But this offset price of Rs121,000 was based on the highest earlier bid and not on the production level. Shashwat and the co-operative suggested that the offset price for Dimbhe be fixed according to the 2002 circular of the government, which would make it Rs54,000 annually, and that the formula be revised. They suggested that the price be based on the actual fish production in nearby, similarly sized reservoirs. After three years of multiple representations, the government, in 2009, resorted to old lease amounts but the formula revision was not taken up.

Thanks to CIFE, the co-operative took steps to improve the aquatic productivity of the dam. In 2006, CIFE conducted a preliminary survey of the dam and found that aquatic productivity was just 50 per cent. It noted that zooplanktons were scanty. In consultation with CIFE, Shashwat and the co-operative took up planting of the green manure crop, *taag/dhencha* in the draw-down land. As the water levels rose and the crop was submerged, they formed feed for

BUDHAJI DAMSE

Fishermen with their catch at Dimbhe reservoir in the Indian State of Maharashtra. They have resolved not to use poisons or explosives for fishing

TIFFANY FRANKE

Tribal women engaged in rearing ornamental fish in floating cages in the Dimbhe reservoir in Maharashtra, India

the carp. Later, when the water level dropped, farmers sowed wheat in this draw-down land. The farmers found their yield to be substantially higher than before the planting of *dhencha*. With NFDB support, *dhencha* planting was taken up in a larger area.

In spite of several setbacks, the community has persevered; in the rainy season of 2008, a pest attack caused teak trees around the reserviour to shed their leaves. The green leaves got washed down in the reservoir water with the rains, forming a sticky mass that glued the nets when deployed. Undoing this damage would take a few hours of hard scrubbing with detergent. In addition, in 2009 and 2012 the dam did not fill to capacity, reducing the water volume available for fish growth. In 2011, due to heavy rains, the five gates of the dam were opened for a day and a half. The next day, Shashwat reports that one could see people lined up downstream collecting the fish which had died from the 72-m fall down the spillway. Similarly, in August 2013, four to five truckloads of large fish were lost on the first day of opening the dam gates.

However, with the support of Shashwat and the government's fisheries and tribal development departments, and institutions like CIFE and NFDB, the community has overcome these problems. The catchment area being well-forested, and with hardly any chemical fertilizers being used, a high price for the fish caught in Dimbhe was expected. Yet this is not the case since the quantity of fish caught is not enough to justify a separate market and the co-operative does not have access to markets in the cities.

Unfortunately, the focus on carps has led to decline in 16 local species. These have also slowly lost their market value. In spite of these drawbacks, the fishers are looking forward to ensuring self-sufficiency in managing the fishery; in 2012-13, the co-operative recorded a profit. Some of its future plans include building an ice plant, acquiring another motor boat for transporting the catch, providing boats to less fortunate members, and raising working capital for the women's ornamental fish business. The ice plant has been approved by CIFE, which has also helped the co-operative to install a mini-hatchery from which the first fish seed of *rohu* was produced in August 2013.

For more

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Shashwat: Building Sustainable Livelihoods for Tribal Communities

Taking Turns Fishing

The Faroe Islands fishing-days system offered hope of regulating fishing effort but now seems to have come up against problems

Until the extension of the fishing grounds limits to 200 miles in 1977, fishing in the Faroe Islands was mainly in the distant waters. But since then the order on the sea has changed. The fishers had to transfer most of their fishing effort to the waters around the Faroes. The fleet was mainly fishing for bottom-dwelling fish like cod, haddock and saithe, a kind of pollock, and the gear used was mostly longlines and trawls. The fish catch was sent to factories ashore.

Until 1994, there was no fishing regulation, but then unpredictably stocks of cod and haddock declined dramatically, causing a serious economic crisis for the Faroe Islands. As a result, a quota system was introduced for these species, with a smaller quota for cod and haddock and a larger one for saithe. Soon cod and haddock stocks recovered to above-normal catch levels.

After a couple of months, in 1995, all the quota for cod and haddock had been fished out, while there was plenty of saithe quota left. Since the the fishing effort for these species are combined and not selective, we had to stop all fishing for the rest of the year as it was not possible to fish saithe without fishing cod and haddock as well.

This was impossible for a fishing community and we realized we had to find a solution other than a quota system to manage the fish stocks. The result was a new management system of individual transferable quotas (ITQs), introduced in 1996, with various restrictions on transferability. The quotas are not allocated as tonnes of individual species but as fishing days for various groups of fishing vessels in the Faroese fisheries zone. There are five groups of vessels and the system is based on an assessment of the fishing capacity of each vessel group, drawing on data from the period 1985-1994.

In every annual fishing season, each group of vessels is allotted a number of fishing days, which are again divided among a number of individual licencees in each group.

Until 1994, there was no fishing regulation, but then unpredictably stocks of cod and haddock declined dramatically...

The Committee on Fishing Days, which is made up of industry representatives, gives recommendations to the Minister for Fisheries. The Faroese Fisheries Laboratory assesses the state of the fish stocks and makes recommendations on the number of fishing days and other regulatory measures needed. The Minister then decides on the quotas and prepares a bill to amend the Commercial Fisheries Act.

Regulations

The bill is reviewed by the Fisheries Advisory Body, and is then introduced to the Løgting, the Faroese Parliament, shortly before the new regulatory year starts in September. The system can be better understood with the help of the table below.

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		Number of licences	Fishing days: 2003-2004
Pair trawlers		29	6,636
Longliners		19	2,452
Coastal vessels	Larger than 40 GRT	45	4,269
	15-40 GRT	41	4,328
	Less than 15 GRT	1,200	21,776

The fishing days are divided equally between the vessels in each group, which were the ones existing when the system was established. There are certain rules for exchanging or upgrading an old vessel. Sometimes the result could be two bigger vessels in place of the earlier two smaller ones—but essentially the fishing effort cannot increase.

It is also possible for fishers to buy and sell fishing days within the main group's longline and trawl fleet. The licences are linked to the vessels and not to the owners or operators. The licence for fishing days can be used anywhere within the 200-mile fishing zone. Some areas are closed to fishing effort, in some cases for all types of fishing, in other cases for trawl or longline fishing.

...accurate predictions are not possible with the present-day knowledge, and so assessments occasionally turn out to be quite wrong.

If the catches landed are found to consist mostly of juveniles, the fishing ground can be closed immediately for one or two weeks. Although there is no mechanism to prevent concentration of the fleet, so far that has not been a major problem.

The fishermen of the Faroe Islands are quite well organized in trade unions, while the vessel owners are members of shipowners' organizations. They all have had a part in the development of the fisheries management system, and are members of an advisory body for the ministry.

The fishermen get a percentage of the catch, after deduction of expenses. By and large, the fishermen consider the day system to be the best for themselves and the whole industry, especially for mixed fisheries. Compared to the fishing fleet of the European Union (EU), the vessels of the Faroe Islands do not face the problem of discards.

The main fish stocks in the Faroe Islands have been assessed annually since the 1970s. The assessments are undertaken by the Faroese Fisheries Laboratory and they are checked by the working group and the advisory process of the International Council for Exploration of the Sea (ICES). The assessments have generally been considered of high standard. It is, however, recognized that accurate predictions are not possible with the present-day knowledge, and so assessments occasionally turn out to be quite wrong. That is why the Committee on Fishing Days scrutinizes in great detail the annual assessments and the recommendations based on them, and, in some instances, has declined to make drastic proposals for changing the number of fishing days based on one year's assessment only.

The main objective of the regulatory system is to provide a framework for sustainable fisheries in terms of both biological and economic considerations. All fisheries organizations in the Faroe Islands support the regulatory system. It minimizes the risk of discards and forged catch statistics. It also dispenses with the need to set annual quotas on single stocks as the basis for the fisheries regulation, but allows a certain flexibility for main stocks over a number of years, driven by catches and market prices.

Regulatory system

It has been suggested that the fishing-days regulatory system does not allow the fishing fleet to adapt as quickly as a system with quotas of tonnes of fish since it is often easier to find a market price for

tonnes of fish than for fishing days. This aspect has, however, not yet been fully analyzed.

The inherent problem in a regulatory system based on effort is to monitor increases in efficiency which could change the fishing capacity of the different vessel groups. Since 1996-97, the number of fishing days has been reduced by about 30 per cent for the largest vessel groups, but the level of efficiency has yet to be ascertained.

The fishing-days management system was a success for a number of years. The fishing for cod as well as haddock and saithe was good. But a few years ago some environmental changes were observed in the seas. The most visible indication was the death of seabirds, especially puffins, which had always enjoyed a good habitat and living conditions in the Faroe Islands.

But suddenly, over the past seven years, pufflings have started dying of starvation due to lack of food at sea. The only plausible cause is a combination of environmental/ climate changes and rising sea temperatures.

These changes have also affected the bottom-dwelling fish stocks. New fish species, never seen before, have invaded the seas of the Faroe Islands, especially mackerel, which is a predatory fish that consumes a large amount of the food in the sea, thus depriving other species.

At the same time, the stocks of cod and haddock have declined due to bad spawning, which has also affected the overall fishing effort. Ironically, we seem to be the same situation now as when the fishing-days regulatory system was introduced. While no one knows how the situation should be tackled, the general consensus among the fishermen is that the system should be maintained as there seems to be no other feasible alternative.

TORLEIF JOHANNESSEN

Pair trawlers in the Faroe Islands. The fleet mainly fish for bottom-dwelling species like cod, haddock and saithe

For more

www.mfa.fo/Default.aspx?ID=10811&Action=1&NewsId=1315
Faroe Islands Fisheries & Aquaculture—Responsible Management for a Sustainable Future

www.youtube.com/watch?v=_HwIBGH-7tw
Responsible Fisheries in Faroe Islands

www.fishin.fo/
Living off the Sea in the Faroe Islands

Forging Links of Resilience

The governance needs for Europe's small-scale fisheries involves principles, strategies and guarding against the predations of large-scale fishing interests

There is a saying attributed to the emerging managerial class of the 1970s: "You can't manage what you can't measure". Some might argue that this is particularly relevant for small-scale fisheries (SSF) and the starting point for all their problems. Not quite: "You can't begin to measure what you're unable to define" may be the more appropriate starting point. Academics have spent many hours arguing about how to define small-scale fisheries (SSF), without finding clarity or true understanding. It is knowledge and understanding, rather than facts and figures, that we need if we are to find solutions to their management issues.

Howsoever and wherever we draw the defining line, we are left with a mass of contradictions, anomalies and distortions...

Suspend belief, take a giant leap of faith and assume that we have a simple, universally acceptable definition and can measure the basic economic, social and cultural parameters of SSF. Where do we end up? With a huge diversity of circumstances but very few common denominators to guide our management strategies. Howsoever and wherever we draw the defining line, we are left with a mass of contradictions, anomalies and distortions, especially around the chosen limit. The overall diversity of circumstances—of motivation and aspiration as well as economic behaviour and use of resources—is the essential truth about SSF and a reason why managers have tended to shy away from the challenge.

Returning to reality and examining the basic facts we have about SSF in the European Union (EU), we can derive very little from the simple but undeniably impressive statistical statements that SSF—defined as vessels under 12 m in length—account for 83 per cent of all EU fishing vessels and 35 per cent of the fleets' combined engine capacity but probably no more than 45 per cent of employment in the catching sector and maybe around 25 per cent of catch value. But that statement tells a story of its own: We have accurate figures for vessel numbers, tonnage and engine capacity but only guestimates for labour input and value of the catch. Not only does this point to areas of data deficiency but it may also suggest a rather inappropriate management approach. Much better to define SSF by reference to distinctive modes of organization, economic behaviour and dependence on local ecosystems, rather than through arbitrary but quantifiable proxies such as vessel size.

Coastal fisheries

There are some in Europe's fishing industry who believe that SSF are a throwback to an earlier time and that the industry has moved on. Certainly, the rationale of SSF seems to fit more easily into a context framed by the remote, less well-developed peripheries of western Europe in the 1950s, where small-scale agriculture combined well with intensive, seasonal involvement with coastal fisheries. It made full use of the family's labour resources, provided a reliable, diversified source of income and self-sufficiency, yielded a generally good standard of living and made for sustainable use of natural resources.

*This article is by **David Symes** (dg@dgsymes.karoo.co.uk), Reader Emeritus at the University of Hull. It is a shortened version of the keynote lecture given at the 2013 MARE Policy Day on Giving Small-scale Fisheries a Place, held in Amsterdam*

But those days are past. Both farming and fishing became caught up in economies of scale. Economists and managers alike developed a distaste for pluriactive, part-time involvement seen as involving an imperfect division of labour, failure to maximize the value of production factors, a barrier to modernization and a lack of professionalism. Yet SSF persist in surprisingly large numbers across Europe—not necessarily as a feature of pluriactive peripheral economies—but as a distinctive subset of a modernizing fishing industry found throughout almost all coastal regions in Europe. For many, SSF are the outcome of choice rather than necessity—a preferred form of livelihood and way of life. They have survived quite draconian changes wrought by modernization, globalization and policy reforms but now face perhaps their greatest challenge to date from the privatization and marketization of fishing rights. So, what is it about SSF that makes them so distinctive and resistant, and why should we be looking to develop a policy approach that ensures their continued survival?

On the issue of distinctiveness, it is important to draw attention to two key features. First, SSF form an integral part of local social-ecological systems operating in coastal waters with highly diverse and sensitive natural environments that are shared with an increasing range of other users. The scale of their operations makes them ideally suited to such conditions. Second, SSF comprise small, independent family firms—limited in their operational range, often reliant on a combination of different seasonal fisheries and usually characterized by a particular mode of production that is, in very many ways, different from that governing the behaviour of large-scale, offshore fisheries.

This "simple commodity production" is capable of functioning for quite long periods without earning revenues commensurate with the value of the plant and equipment involved, strongly reliant on the resources of the household, willing to assume tasks normally contracted to third parties (repair and maintenance, sales), less dependent on external sources of capital and credit and, therefore, less driven by the need to make profits to service the debt, and more concerned with the longer-term sustainability of the family enterprise. Unlike the offshore sector, locked into systems of specialization, SSF are, in theory, capable of adapting to changing circumstances through their more flexible and dynamic internal structures. These are, however, under threat from modern fisheries management.

When it comes to explaining SSF's resilience, emphasis is usually placed on a combination of self-reliance, the individual strengths of the family enterprise and the collective strengths of the fishing community. But there are some internal contradictions to be negotiated. On the one hand, we stress the independence and self-reliance of the skipper-owner, and the teamwork, co-responsibility and shared remuneration of the boat crew that contributes a sense of informal co-operation within the small-scale sector. On the other hand, we also recognize the competitiveness of small-scale enterprises bent on deploying their individual skills and local knowledge to outperform their rivals for the sake of local

NIGEL SYMES

Tending lobster pots off the Yorkshire coast in a modern, plastic hulled, under-10-m boat. Small-scale enterprises deploy individual skills and local knowledge

FUNDACION LONXANET

A scene from Galicia, Spain. A combination of self-reliance and the individual strengths of the family enterprise determine the future of small-scale fishing communities

bragging rights, but not intent on doing them down through aggressive competition. The term "co-operating individualists" accommodates this apparent contradiction: competitors who will help each other out in times of emergency. If catching the fish is essentially an individual activity, then collective action brings most benefit to the small-scale sector in the organization of the market for what are typically irregular, small-unit, local landings so as to add value to high-quality fresh-fish produce in what basically remains a low-price commodity market. But converting informal co-operation into more formal collective action can be problematic, especially in those parts of Europe where the co-operative movement has been less strongly developed.

Modern fisheries management systems—especially those designed in conformity with a centralized, command-and-control approach to decisionmaking—are ill-suited to the tasks of SSF management. Fisheries managers become frustrated by the persistence of a significant anomaly that appears to defy the logic of conventional economic rationality, such that a senior administrator some years ago ruefully observed that perhaps the only way to deal with SSF was to ignore them. In 1982, the European Commission showed a level of wisdom never since equalled in the conduct of its Common Fisheries Policy when it decided on a derogation that effectively surrendered responsibility for managing fisheries within 12 nm of the coast to the member States.

In looking to describe the governance needs of SSF in Europe, three policy areas can be identified. The first is the problem of organization. In England, for example, there is an issue with the reluctance of the highly fragmented small-scale sector to organize itself—or be organized—politically. Not only do we have two competing organizations (the National Federation of Fishermen's Organization and the New Under Tens Fishermen's Association) claiming to represent the small-scale sector, each with a rather different take on the way forward for SSF, but around two-thirds of under-10-m vessel owners have chosen not to subscribe to either organization. This makes it impossible to articulate a clear and coherent sectoral view on governance issues that will affect their own futures. Political indifference—or diffidence—can also make it difficult for the views of SSF to be fully represented on national, regional and even local organizations, leaving the sector in danger of being ignored, and raising concerns over the achievement of procedural and distributive justice.

Socioeconomic considerations

The second issue concerns the knowledge base on which policy decisions relating to the SSF are made. Normally in fishing such decisions are made primarily in respect of the need to conserve fish stocks, and that must remain the prime concern in the case of SSF. However, we increasingly find socioeconomic considerations entering the equation of how best to regulate the fishery (and by "socioeconomic" managers usually mean economic!). Clearly, with SSF there is a case to be made for taking more account of the social significance of the small-scale sector and the way that SSF operate. That makes it imperative that those who make the policy decisions have a clear

understanding of the social and economic mechanisms that underpin SSF. This, they currently lack.

But the main governance issue concerns the choice of policy approach. Modern fisheries management has become synonymous with restrictive regulation. Its impact has been to reduce the level of discretion available to the operator as to when, where, what and how to fish—anathema to the many small-scale operators who need the flexibility to switch between locally available species in order to build a viable business. To date, most small-scale operators have not suffered from the regulatory stranglehold to the same extent as that now imposed on their counterparts in the mixed demersal fisheries. But there are worrying signs that fisheries administrators are keen to standardize the systems of management throughout the fisheries sector. So what are the basic choices in deciding the policy approach to SSF? Three questions can perhaps help to delineate the most appropriate line of action.

The question of an integrated or differential approach was raised by the EU's 2009 Green Paper that set out an agenda for the reform of the CFP. It outlined an approach that would leave the large-scale sector, where capacity adjustment and economic efficiency remain core concerns for policy makers, to be managed according to market-based systems of resource allocation (transferable fishing concessions). By contrast, the small-scale sector would be managed through non-transferable individual allocations of quota and effort entitlements (or through local community quota schemes). While this proposal received widespread support from member States, the majority verdict was that it should be left to the coastal States to decide how to manage their SSF. That still leaves us with the need to devise more nuanced systems of management that take account of the particular conditions in the countries concerned.

The second question—a sectoral or zonal approach—asks whether we need a policy approach that is dedicated to SSF howsoever defined or one concerned with the management of inshore waters. The focus has to be the inshore waters defined by the 12 nm territorial sea or possibly extended to 20 nm.

Such a framework opens up realistic opportunities for genuine ecosystem-based management (in place of the current token concessions), closer integration between fisheries and environmental management (instead of the attempt by marine conservation interests to impose their will through unscientifically selected marine protected areas), properly balanced marine spatial planning (rather than the hegemony of large corporate interests), and the delegation of management responsibilities to local institutions.

The framework would also allow for preferential treatment of SSF through limitations on vessel size and use of specific gears in all or parts of the inshore zone.

Inshore management may not embrace the entire operating range of all small-scale enterprises but it would arguably contain the major part of SSF interests.

But there are worrying signs that fisheries administrators are keen to standardize the systems of management throughout the fisheries sector.

Delegation

The answer to the third question—national or local management—follows on from the previous argument. If the management system is to respect the distinctive nature of SSF, the regional variations in their make-up, and reflect and build upon their association with fishing communities, it can only be achieved through the delegation of responsibility and authority to local, stakeholder-led organizations. What is surprising is how uneven this

transfer has been in Europe. There appear to be relatively few fully devolved systems of governance for inshore fisheries: one of the more successful examples occurs in the United Kingdom—or, more precisely, England—where for around 120 years there has been a viable system of local co-management based on Sea Fisheries Committees (SFCs) made up of local authority members and representatives of the fishing industry.

With bylaw-making powers and other fisheries-specific instruments, SFCs had the capacity to take a wide range of management decisions, subject to the consent of the central administration. Moreover, each SFC had its own seagoing and land-based enforcement capability.

Recently, the system has been modernized and renamed Inshore Fisheries and Conservation Authorities (IFCAs), indicating a shift in emphasis towards the integration of fisheries and environmental management.

Among the more important policy objectives for SSF are fair allocation of access to fishing opportunities; protecting the sector from the unintended consequences of conventional management measures targeted at the offshore sector; maintaining the flexibility of small-scale fishing activities that facilitate the sector's adaptation to both short- and long-term change; and focusing on (re)building the sector's resilience.

Across Europe, we already have sufficient knowledge and understanding to appreciate the economic, social, cultural and regional importance of SSF, and we are beginning to get to grips with the difficult challenges of ensuring their effective governance and establishing their rightful place in the overall management of valuable yet vulnerable living marine resources.

However, we still have some way to go to convince the scientific, managerial and political elites of the need for investment in alternative management approaches. There is no single template for the governance of SSF within Europe. While the broad principles of good governance may be universal, strong contrasts in the physical and cultural geographies of Europe dictate the need for the evolution of local solutions rather than the imposition of a basic structure.

The role of the higher levels of governance is to define the principles, outline a broad strategy, and create a firewall to protect SSF from the predations of large-scale fishing interests; but it will be the task of local co-governance institutions to manage the fisheries.

There are several internal issues that the sector must resolve for itself: leadership at the local level, organization and representation—and with these, the ability to find a clear and coherent voice to express its own views on how to manage its future, and the will to act collectively in pursuit of its common goals. But the tasks facing the small-scale sector go a little deeper.

The fishing industry, in general, and SSF, in particular, sometimes stand accused of too much introspection, of cultivating a ghetto mentality and ignoring—and being ignored by—the wider world around them. There is, therefore, a need to reconnect with local society, to forge links with other sectors of the coastal economy and to build political alliances at the local level that will help to strengthen its resilience in the challenging years ahead.

For more

smallscales.ca/2013/04/15/cp/
Small-scale Fisheries

eussf.icsf.net
Small-scale Fisheries and the EU CFP Reform Process

igssf.icsf.net
Small-scale Fisheries Guidelines

Economically Valuable

Though often overlooked and undervalued, small-scale fisheries make key economic contributions and are overwhelmingly important for coastal communities

Small-scale fisheries are not so small after all. In a remote, rural, locally managed marine area along the southwest coast of Madagascar, we find that small-scale fisheries and their host ecosystems are crucial to supporting the welfare and livelihoods of over 6,000 coastal inhabitants. Nearly everyone fishes, earns their livelihood from fishing, and subsists on seafood. There is nothing small about their economic value, either—the fishery in this 1,000-sq-km, locally managed marine area was worth nearly US$3.4 mn in 2010 alone.

National fisheries policies tend to ignore small-scale fisheries because their true value is obscured by their dispersed nature. Worse, fisheries policies privilege commercial/industrial fisheries due to their perceived market value. Our research shows that small-scale fisheries can have significant economic value, in addition to their role in food security and livelihoods for some of the poorest people on earth. Quantifying their economic contribution, such as we did in this study, should help this important sector gain more policy attention.

Small-scale fisheries (often also referred to as artisanal) provide a crucial source of food, income, and well-being for coastal populations worldwide. Over 90 per cent of the world's fishers work in the small-scale fisheries sector. Together, their fishing activity supports the livelihoods of over 500 mn people globally, many of whom belong to the world's most impoverished communities.

Despite small-scale fisheries' importance, very little information exists on the worldwide scope and impact of small-scale fisheries. We, therefore, can only guess at the significance of small-scale fisheries for combating food insecurity and poverty, as well as their contribution to the broader local and regional economies. Due to this lack of information, small-scale fisheries are often undervalued and overlooked in policy.

In contrast, policymakers usually are better informed about the scope and value of large-scale industrial fisheries. These fisheries are typically export-oriented, and, in many cases, access is granted to foreign fishing vessels through concessions. Since economic development is, typically, a priority, policies are often designed to favour these large-scale export-oriented industrial fisheries.

...small-scale fisheries can have significant economic value, in addition to their role in food security and livelihoods...

Considerable pressures

Meanwhile, marine and coastal fisheries face considerable pressures on a global scale, with several in a state of precarious decline. These pressures threaten the livelihoods of millions of people worldwide who depend on them for subsistence and income. In many developing countries, this situation is worsened by weak governance, which makes it even more difficult to design, implement and support effective fisheries policies.

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GARTH CRIPPS

Small-scale fishers in Madagascar returning to shore in their traditional fishing crafts, called *pirogue*s

In order to safeguard the livelihoods of some of the world's poorest communities, decisionmakers must recognize the crucial importance of small-scale fisheries and develop sustainable management policies. To support this process, we need a better understanding of the scope and significance of small-scale fisheries and their social and economic value.

The developing country of Madagascar, located in the western Indian Ocean off the east coast of Africa, is a prime example of the issues surrounding small-scale fisheries globally. Madagascar is one of the poorest countries in the world, and is plagued by chronic political instability and declining economic trends. The majority of people in Madagascar depend directly on small-scale fisheries or other natural resources to support their livelihoods. Yet the country is increasingly threatened by ecological degradation and a growing population.

To demonstrate the crucial contribution that small-scale fisheries make to the daily survival of coastal populations, and to highlight the need for their consideration in policy discussions, we conducted a large and comprehensive study on the total economic value of small-scale fisheries in the Velondriake locally managed marine area in southwest Madagascar, which we summarize here.

Velondriake spans over 1000 sq km of Madagascar's southwest coast. This region is home to indigenous people who support their livelihoods primarily by fishing and gleaning on coral reef flats, or "reef gleaning".

In 2010, we interviewed over 150 fishers, held discussions with several groups of fishers, surveyed over 300 households, and talked with several other key individuals in Velondriake about all aspects of fishing. We asked fishers about what fish they caught, where they caught it, what they did with it (for example, did they eat it, share it, sell it or trade it) and what gear they used.

From household members, we collected information on how much of their income depended on fishing or reef gleaning, and how many people they supported with their catch and income. In the group discussions, we gathered information on the cost of different fishing gear items, and how often they had to replace them. Finally, we asked key individuals the price in the local market for the different species of fish or other seafood items gathered when reef gleaning.

We summarize below the information we gathered, and its implications for fisheries policy and management globally. We estimate that in 2010 alone 5,524 tonnes of fish and other seafood species were extracted by small-scale fishers in the region, primarily from coral reef ecosystems. The total economic value of the fishery for 2010 was $3.4 mn. Eighty-three per cent was sold commercially, generating fishing revenues of nearly $2.9 mn.

In this region, the local small-scale fishing sector employs 87 per cent of the adult population, generates an average of 82 per cent of all household income, and is virtually the only non-rice source of protein people eat.

Men and women

Fishers are predominantly men, while reef gleaners are predominantly women. Fishers primarily target

finfish, while reef gleaners primarily target octopus, sea cucumber, shellfish and crab. Other species, such as Madagascar round herring, squid and urchin are also occasionally caught by both fishers and reef gleaners.

The majority of the total annual catch in the region is cheaply priced finfish, such as *mojarra*s, damselfish and squirrelfish. Second is octopus (mainly *Octopus cyanea*), which is closely followed by average priced finfish, such as sea bass and groupers. We found that cheaply priced finfish contributes the highest revenues, followed by sea cucumber, octopus and average-priced finfish.

Gleaners typically gather their catch by hand or use wooden spears on coral reef flats and seagrass beds. The majority of fishers use nets. Fishers find their catch primarily on coral reefs, but also in mangroves, seagrass beds, pelagic waters, mud and other miscellaneous habitats.

Fishers catch the most per fishing day, followed by those who both fish and reef glean, and then those who only reef glean.

All of the octopus, sea cucumber, crab and lobster, and almost all of the Madagascar round herring, is sold commercially in local markets. Approximately three-quarters of the total catch of finfish, squid, shrimp and shark is also sold. Shellfish, urchins, bivalves, turtles and rays are primarily consumed and shared locally, as is the remainder of finfish, squid, shrimp and shark.

Fishers generate the highest revenue per day, but those who both fish and reef glean reported a greater number of days of fishing/gleaning per year.

Accounting for the cost of fishing gear for each type of fisher, those who both fish and reef glean generated the highest net annual income, where the costs of fishing are subtracted from total revenues.

Though national policies typically disregard small-scale fisheries due to their assumed minor contribution to the greater economy, this sector can generate substantial revenues. Our findings indicate that the small-scale fisheries sector in this single 1000-sq-km region of Madagascar is at least one-and-a-half times as valuable as the total annual revenue Madagascar earns from concessioning its exclusive economic zone waters to European Union tuna vessels, and a sixth as valuable as the country's entire domestic shrimp industry—two industries that receive substantial policy attention.

Extrapolating our local results to the national level, we estimate that subsistence and artisanal fishers in Madagascar catch over 350,000 tonnes of fish and other seafood species per year. Though this estimate is uncertain and should be updated as more regional-scale data become available, it suggests that the small-scale fisheries sector is likely much more valuable than previously thought.

Our findings also pointed to the crucial role that small-scale fisheries play for food security and in combating poverty. In Madagascar, nine out of ten people live in poverty, and half of all children are malnourished. According to our results, virtually all meals with animal protein and nearly all household income depended on small-scale fisheries resources. Daily per capita income from fishing and reef gleaning amounted to $1.04, which is only slightly above the international poverty line. Small-scale fisheries thus play a crucial role in sustaining local populations and preventing households from falling further into poverty.

...we estimate that subsistence and artisanal fishers in Madagascar catch over 350,000 tonnes of fish and other seafood species per year.

Institutional capacity

Considering the overwhelming significance of small-scale fisheries, as demonstrated here, there is an urgent need to improve institutional capacity and re-orient national fisheries

GARTH CRIPPS

Local fisherwomen gleaning octopus in Velondriake, southwest Madagascar. Wooden spears are the most commonly used gear in this region

policies toward the small-scale sector. This is necessary not only for the country of Madagascar, but for regions throughout the world, where small-scale fisheries have likewise been undervalued and overlooked.

Long-term sustainability should be a fundamental goal of small-scale fisheries policy in order to protect and maintain their contributions toward food security and poverty alleviation.

Small-scale fisheries face a range of impacts, including the looming threat of climate change. Further, small-scale fishers face increasing resource competition from commercial fleets, sparked by declining catch.

Sustaining small-scale fisheries should, therefore, be viewed as a human-rights issue, and given precedence over export oriented commercial or foreign access to fishers in circumstances where they are vital for supporting local populations.

The establishment of locally managed or co-managed marine and coastal areas, such as the one we studied in Madagascar, may help to sustain and even increase benefits provided by small-scale fisheries. However, these initiatives will need to be supported at the regional, national and international level to be successful in achieving long-term sustainability.

As small-scale fisheries are both of considerable importance for millions of people throughout the world, and worth a lot economically, national and regional policymakers need to re-examine existing fisheries policies that neglect this sector.

Determining the economic value and contribution of small-scale fisheries can help ensure their consideration in policy; efforts should, therefore, be undertaken to quantify them wherever possible.

For more

www.sciencedirect.com/science/article/pii/S0165783613001537

The Total Economic Value of Small-scale Fisheries with a Characterization of Post-landing Trends: An Application in Madagascar with Global Relevance

Private Eye

The use of approved private companies for the inspection of small fishing vessels in Norway has proved successful

Being a fisher is a dangerous occupation, and being a fisher on a small fishing vessel is considered as the most dangerous occupation in Norway. The Norwegian Maritime Authority (NMA) sees a need for inspection of fishing vessels to ensure safety for the vessel and the fisher, and these inspections should be related to both the structure of the vessel and to equipment on board the vessel.

Norway has a fleet of more than 6,200 fishing vessels of various sizes, from the smallest open boats of around 5 m to large trawlers up to over 100 m in length. Fishing vessels over 15 m are inspected and certified by NMA, and, since 2001, a group of around 800 fishing vessels between 10.67 m (35 ft) and 15 m, have been overseen by approved private companies on behalf of the NMA.

If the vessels fulfill the requirements, a document called "Instruction for use of the vessel" is issued. Such a document is needed to operate the vessel. Vessels under 10.67 m are currently not surveyed, but from January 2014, vessels over eight m will be included in the same regime as vessels between 10.67 and 15 m.

The number of fishing vessels in Norway makes it impossible for NMA to conduct inspections on all these vessels, and NMA has, therefore, chosen a regime with approved private companies that conduct these inspections.

There are two major requirements that need to be fulfilled to become an approved private inspector—competence and a quality system. Companies, not individual persons, have to apply to become approved.

The minimum required competence in the approved private company is either naval architect, chief engineer, master, mate or similar position. However, some competence can be covered through agreements with other companies. Several of the approved private companies are small consultancy firms within the maritime sector, and many of these use subcontractors to cover all the different disciplines.

Norway has a fleet of more than 6,200 fishing vessels of various sizes...

All companies that apply to become approved as private inspector need a quality system that meets the requirements of the ISO 9001 standard. This system is reviewed by NMA before approval. If the quality system is certified, NMA only review the parts that describe the inspections of fishing vessels. A quality system according to ISO 9001 ensures that the company has a good system for quality management, procedures for carrying out the inspection work, and continuous improvement within the company.

Inspections

Inspections of fishing vessels between 10.67 and 15 m in Norway are divided into inspection of new vessel building or imported vessels (initial inspections) and inspection of

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BJARTE AMBLE / NMA

The fishing vessel *Vikingfjord* sailing to its home port at Herdla in Norway before being inspected by a private inspector. The inspection focuses mainly on safety equipment

operating vessels. Inspection of new vessel building takes place during the building process, and must be finished before the vessel can be put into operation. During the process of a new build, there is also review of drawings and documentation of the vessel. The inspection and review of documentation ensures that the vessel is built according to the regulations.

If a vessel is imported into Norway, documentation must be reviewed, and the vessel must be inspected before it can be put into operation. If the vessel is certified from another authority, and the certificate is still valid, the vessel might be put into operation during the period where documentation is reviewed and the vessel is inspected, but this must be considered on a case-by-case basis.

When a newly built or imported vessel is inspected and found to be according to the Norwegian regulations, a document called "Instruction for use of the vessel" is issued, and this document equals a certificate and is needed for the vessel to operate. The "Instruction for use of the vessel" contains information and restrictions for the vessel, and is valid for 30 months. Within the period from 24 to 30 months after the initial inspection, an intermediate inspection is conducted on the vessel.

This inspection focuses mainly on the safety equipment on board the vessel, and, when everything is found to be in place, the "Instruction for use of the vessel" is renewed for another 30 months. After these two periods of a total of 60 months, a renewal inspection is carried out, during which the hull and propeller are inspected in addition to the equipment.

Equal treatment

It is important that all vessels and vessel owners are treated equally when enforcing regulations. The Norwegian coastal line is long, and the distance between inspectors

and companies might lead to challenges in these areas. When NMA carries out the inspections, our quality system, including procedures and checklists, ensures equal treatment of all vessels. When these duties are carried out by approved private companies, NMA must ensure the same equality between the private inspectors.

Being an approved private company implies being a part of a rigid regime, and all inspections are to be done according to checklists from NMA. There is one list for initial survey, and one list for operating vessels. Checklists are divided into different fields, such as hull, machinery, navigation, etc., and contain clear instructions to the inspectors on what is accepted. Furthermore, deficiencies on all checkpoints are pre-categorized, to make decisions for the approved private companies easier and equal.

As a part of the quality system, the private company needs procedures that describes how the inspection work and document control is to be done, and these procedures are reviewed by NMA. These procedures normally contain a step-by-step description of the job for the inspector, and ensure that all the different private companies perform to a certain standard.

Every year, NMA does a number of unscheduled inspections on all kinds of vessels, including fishing vessels of all sizes. The unscheduled inspections include a variety of checkpoints on different areas of the vessel, and the findings may give an indication to whether the private inspector is doing a satisfactory job.

In addition to contact with the private inspectors on a case-to-case basis, NMA carries out audits of the approved companies at least every three years.

The audits focus on the quality system, whether it is according to the ISO 9001 standard, that the procedures ensure equality and quality in the work of the approved private companies. Furthermore, the audit focuses on whether there is compliance with the quality system in the company.

The system with use of approved private companies to survey the smaller Norwegian fishing vessels has now been in operation for more than 12 years, and NMA has a good foundation to conclude on whether it has done a good job.

Findings in both our audits and unscheduled inspections and the accident statistics suggest that the quality of the fishing fleet inspected by private inspectors is as good as the fishing fleet inspected by NMA.

We, therefore, deem the use of private inspectors as a success, and are looking to expand the scheme.

For more

www.sjofartsdir.no/en/
Norwegian Maritime Authority

Unconstitutionally Geared

A recent ruling by Costa Rica's highest judicial body that shrimp trawling is unconstitutional raises several questions

In August 2013 Costa Rica joined a select group of countries in Latin America that have instituted trawl bans. This was in response to a lawsuit filed by six environmental organizations—Asociación Programa Restauración de Tortugas Marinas (PRETOMA), Federación Costarricense de Pesca Turística (FECOPT), Fundación Marviva, Fundación Promar, Internacional Students Volunteers Inc. (ISV) and The Leatherback Trust (TLT)—against several articles of Costa Rica's 2005 Fisheries and Aquaculture Law. The environmental NGOs were also backed by a number of artisanal fishing bodies. In doing so, Costa Rica became the third country in Latin America to impose a ban on this gear, following Venezuela and Ecuador.

Of the 44 mn people currently living in the Central American region, an estimated 35 per cent live in poverty.

According to Randall Arauz, President of the Marine Turtle Restoration Project (PRETOMA), one of the NGOs heading the anti-trawl campaign, shrimp trawling licences have few restrictions, allowing boats to target other species as long as they declare them as bycatch. "In Costa Rica, a licence to trawl is a licence to kill," he said. "Industrial shrimp trawlers can target snappers, call them bycatch and not leave anything for local fishermen."

The Constitutional Chamber (Sala IV) of the Supreme Court of Justice, Costa Rica's highest judicial body, declared trawling unconstitutional due to its damaging effects on the marine ecosystem. They ruled that the issue of new trawler licences for shrimp fishing and the renewal of existing ones be prohibited.

This article explores the background to, and details of, this ban, examining how and why it came about. It also draws out some key lessons learned and issues that need to be followed up on in order ensure the achievement of a wider set of environmental, social and economic objectives for the country.

Six countries share the territorial space of the Central American region: Belize, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. They form what is known as the Central American isthmus, the largest in the world, with the most complex biophysical characteristics. All the countries, except El Salvador and Belize, have coasts facing two oceans. Their combined coastline stretches for 3,800 km on the Atlantic/Caribbean side and for 2,800 km on the Pacific side. The combined area of their exclusive economic zone (EEZ) is one mn sq km on the Pacific and 600,000 sq km on the Atlantic side.

Of the 44 mn people currently living in the Central American region, an estimated 35 per cent live in poverty. Several regional studies carried out by the State of the Region programme highlight that significant inequalities persist amongst the people living in Central America according to their gender, age, ethnicity and place of residence.

Important species

In Central America, deepwater shrimp aside, the most abundant and commercially important species that

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appear in the landings are generally referred to by colour, like white, pink and coffee. In the Caribbean the following varieties are caught: *Litopenaeus schmitti* (white), *Farfantepenaeus aztecus* (coffee). *F. brasiliensis* (pink), *F. notialis* (pink), *F. duorarum* (pink) and *Xiphopenaeus kroyeri* (shrimplet/ camaroncillo). In the Pacific the following varieties are caught: *L. vannamei* (white), *L. stylirostris* (white), *L. occidentalis* (white), *F. brevirostris* (red), *F. californiensis* (coffee), *X. riveti* (tamarin/*titi*), *Trachypenaeus byrdi* (tiger) and *Protrachypene precipua* (yellow).

Reports indicate that shrimp trawling activities began in the 1950s. In the 1970s, the first signs of overfishing became apparent from excess fleet size. Some preliminary evaluations were carried out using production models, and reductions in the number of vessels were recommended. However, the proposals were not accepted by the companies. In the 1990s, due to increasing fuel prices, the fleet reduced in size, and some countries in the region managed to stabilize yields. From 1996 to 2005 annual recorded landings showed declining trends for the region (see figure).

Costa Rica's coastal zone extends 1,160 km into the Pacific and 200 miles into the Caribbean. Its marine territory of 589,000 sq km is ten times larger than its land area (see map).

According to various sources, official records of shrimp landings date from 1952, following the introduction of shrimp trawling into the country, and show a total catch of 43.2 tonnes in that year.

The Costa Rican fleet of deep-water and coastal shrimp trawlers has an estimated 73 licensed vessels, of which 63 licences are for fishing coastal shrimp, 44 are active, three have expired and not been renewed, eight are in default and suspended, and eight others are inactive at the request of the concessioners. Of the 10 licences allocated for deep-water shrimp, two are active and eight inactive.

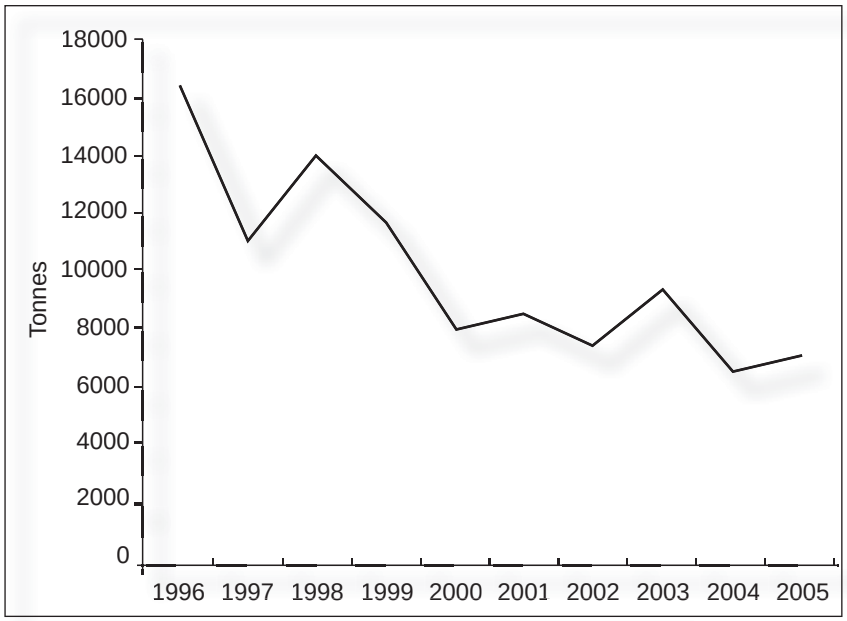
In recent years, a policy debate on marine conservation has developed in the country, linked to the relevance of maintaining semi-industrial fleets for catching shrimp.

In terms of conservation, since 2004, through Executive Decree 32731-MINAE, the country has set itself the objective of analyzing the feasibility of dedicating up to 25 per cent of the EEZ for conservation, restoration, management and sustainable exploitation of fishery resources.

One of the results of this is that NGOs interested in marine conservation have been encouraged to promote and engage in judicial actions aimed at eradicating this kind of fishing.

Numerous studies have been carried out in the region and globally on the negative impacts of fishery activities using trawls and industrial fishing gears. In some parts of the Pacific, artisanal trawling is also carried out.

In policy terms, the Costa Rican State has a track record of subsidizing the fishery sector (including artisanal, semi-industrial and recreational fishing). Data published by the Mar Viva Foundation in 2010 estimate that in 2008 the fuel tax exoneration given to the shrimp trawl sector amounted to US$1.74 mn, benefitting 47 vessels that continue to operate. On average, each vessel was exempted



Shrimp landings in the Central American Region over the period 1996–2005
Source: FIINPESCA, 2007

from payment of $37,000, equivalent to a subsidy of $2.52 per kg of shrimp.

It is worth mentioning that other sectors have also received exemptions from the Costa Rican State, although no criteria have been used to ensure a fair distribution of these benefits, which would allow the more vulnerable sectors, like the artisanal fishery sector, to be strengthened.

...there are historic ties between the fishermen who work in the industrial fleets and those from artisanal fishing communities.

In social terms, analyzing how to regulate the environmental impacts of the shrimp trawling sector is more complex. On the one hand, the destruction of shallow-water coastal ecosystems directly affects small-scale fisheries in both economic and ecological terms. On the other hand, there are historic ties between the fishermen who work in the industrial fleets and those from artisanal fishing communities. For example, part of the catch may be shared, and used for bait by the artisanal fleet. In several small-scale communities the trawler bycatch is shared, and members may barter other consumable goods for fish for home consumption.

In terms of employment generation, it is estimated that 250 to 300 crew and around 600 women would lose their jobs if this fleet halts productive activities.

The Sala IV ruling declared shrimp trawling unconstitutional through Resolution No.2013010540. Exp: 12-010016-0007-CO, according to which:

"As a result of the action, the mention 'of shrimp with trawl nets' in sub-paragraph (d) Clause 27 of Article 2 and sub-paragraph (d) of Article 43, as well as in sub-paragraphs (a) and (b) of Clause 47 of the Law on Fisheries and Aquaculture, Law 8436 of 1 March 2005 is declared unconstitutional. In accordance with Article 91 of the Constitutional Jurisdiction Act, this ruling is declarative and retroactive from the date the aforementioned norms came into effect, without prejudice to those who acquired rights in good faith. In consequence, following the notification of this judgement, INCOPESCA (the Costa Rican Institute of Fisheries and Aquaculture) should not provide any new permits, authorizations or licences for shrimp trawling, renew existing ones or re-activate inactive ones." (Extract of the vote on Res. 2013010540. Exp 12-010016-0007-CO).

The ruling is supported by technical studies that demonstrate and confirm the negative impacts on the marine environment caused by trawl fishing. One interpretation is that a contradiction exists in Article 50, amongst others, of the Political Constitution of Costa Rica, reformed by Law No. 7412 of 3 June 1994 that states:

"The State shall endeavour to ensure the maximum well-being of all the inhabitants of the country, organizing and stimulating production and the most equitable distribution of wealth. Everyone has the right to a healthy and ecologically balanced environment. It is, therefore, legitimate to denounce acts that infringe that right and to claim reparation of the damage caused. The State will guarantee, defend and preserve that right. The law will determine who is responsible and the corresponding sanctions."

Following the notification of this ruling, INCOPESCA will not be able to (a) provide any new permit or licence to fish for shrimp with bottom trawls; (b) renew existing permits; and (c) re-activate inactive ones. Existing permits, authorizations and licences will remain valid until they expire. Once a licence has expired, it cannot be extended.

Active vessels

Based on 2010 information from the Mar Viva Foundation, the first licences were set to expire in March 2013, with the permits of 40 active vessels ending in 2018. The status of the expired licences has not been followed up on. But the ruling also provides a way out for trawler owners. It specifies that, under the supervision

of INCOPESCA, the vessel owners may carry out trawling and new permits may be issued in strict accordance with the legal system. This is subject to adopting, where scientifically feasible, those technologies that are as environmentally friendly as possible, that have demonstrated “a significant reduction of such bycatch that is compatible with sustainable democratic development”.

The ruling polarized national opinion. On the one hand, non-governmental marine conservation organizations saw the ruling as a major victory. On the other, the State sector immediately began legal processes to seek an alternative solution that allowed the industrial fleet to continue its activities. A new bill has already been drafted that, if passed, could make shrimp trawling legal again. This political response is possibly motivated by the political and economic power wielded by the owners of the shrimp fleet. A week after the ruling, shrimp trawler owners and workers clogged the main route from Caldera to Puntarenas, both on the central Pacific coast, blocking traffic for hours.

The situation is highly complex. In Costa Rica, NGOs that traditionally were involved in marine conservation issues show few signs of any commitment to address, in a serious way and in the long term, the social issues arising from conservation. Neither they nor the Costa Rican State acknowledge the relevance of fisheries (above all, the artisanal sector) as providing the basis for productive activities that are of enormous importance for the food security and the well-being of coastal marine communities. Clearly, the only interest of the NGOs is in conservation, with an increasingly neoliberal tendency. Meanwhile, for its part, the State is only interested in promoting activities that provide benefits of an exclusively economic nature.

The question that lies behind the trawl rulling is whether or not these organizations, both governmental and non governmental, have taken advantage of artisanal fishery organizations to achieve their objectives without having any genuine interest in supporting small-scale artisanal fishing in Costa Rica as a dignified productive activity of importance for the development of the country. There are various cases in the country where organizations and small-scale fishworkers feel that they have been deceived and used by similar movements. The ultimate objective has been conservation, and sadly linked to it, disrespect for the land-tenure rights and rights to marine territories used for the development of artisanal fisheries.

The State’s position is clear. The current Costa Rican government has a blinkered economic perspective that does not see the valuable contribution the sea and its resources can make to the well-being of the people and to improving the plight of the most vulnerable groups. Suffice it to say that the main opponents to the Sala IV ruling is INCOPESCA itself, the national institution responsible for fisheries and

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Costa Rica is part of the Central American isthmus, the largest in the world, with the most complex biophysical characteristics

COOPESOLIDAR R.L.

Small-scale fishers from the Tárcoles community in Costa Rica. With over seven years of experience, these fishers have been able to manage their resources well

aquaculture which initiated the drafting of a bill to contest the immediate impacts of the ruling made by the Constitutional Chamber on the trawler sector.

According to statements made by the Executive President of INCOPESCA through the media, the legal aspects of this ruling are more important than the technical aspects. It is also considered that the impacts of the ruling will provoke an increase in unemployment in the coastal province of Puntarenas, which could be seriously affected by the cessation of trawler activities.

From a legal perspective, says jurist Marion Peña Chacon, the constitutional ruling opens up the possibility for a new interpretation in accordance with the principles of environmental law in Costa Rica. This concerns how the impacts of the rulings on unconstitutionality are analyzed and measured, where there exists a conflict between the rights acquired in good faith and the collective rights of an environmental nature.

The pertinent details expressed by the vote is that acquired rights cannot be violated when they come up against environmental rights and, specifically, when a right allegedly acquired challenges a collective environmental right. If the former threatens the conservation or sustainability of the latter, the political constitution protects the environmental right, because of irreparable damage done to the environment.

It is worth clarifying that the decision from Sala IV (Constitutional Chamber) came about through a dissenting vote. If there had been a unanimous vote, all the shrimp vessels would have had to cease their activities immediately. This situation has opened a possibility for the trawler sector to find a solution.

Outside Costa Rica, even when the aforementioned vote generated the expectation that the measure would be applied immediately and irreversibly, it is clear that a possibility exists, through the corresponding legal reform, that in the future the categories that have been removed could be reinstated, on the condition that specific reference is made to the obligatory use of measures to reduce by catch (through bycatch reduction devices), so long as there is a prior modification of the law. With corresponding scientific and technological backing, a significant reduction in bycatch can be demonstrated.

Without downplaying the importance of the unconstitutionality vote, it is important to recognize that, from an ecosystem perspective, other activities exist that destroy the ecosystems on which the well-being of Costa Rican coastal communities depend.

Ecosystem degradation

These include the degradation of coastal ecosystems through the transformation of land use; the deteriorating quality of coastal waters through pollution from land-based sources; increasing coastal erosion, flooding and instability of the shore; increasing populations and urbanization, which affect marine coastal areas; climate-change factors as well as the expulsion of artisanal fishing communities throughout the Costa Rican maritime zone and the consequent loss of their identity.

Adding to this, artisanal fishing communities continue to be socially disadvantaged as regards levels of health and education, compared to other segments of the population. All the above have a direct impact on coastal marine ecosystems, which are the basis for the survival of local small-scale fishing communities.

Several lessons can be learned from this experience that justify longer-term monitoring and analysis:

1. National and international policy instruments exist that can be used to eliminate the most destructive fleets on the seas and orient such initiatives towards achieving the well-being of the least harmful fleets which are of great social importance, like the artisanal fleets. However, up to now, the marine conservation paradigm in Costa Rica has not brought any benefits to the artisanal fishers, but rather marine conservation practices have caused the country's artisanal fishery sector to be displaced and undermined, with a paradigm that is totally neoliberal and which adopts an approach that takes no account of social issues.
2. Over and above environmental protection interests, there are economic and political interests that affect the most vulnerable fishery sectors (like the artisanal fleet). This tends to polarize national-level positions around whether the best option is to protect the trawling industry or to eliminate it. At the time the ruling was announced, there was no perspective in Costa Rica that placed importance on the issue of marine conservation linked to well-being and which focused attention on artisanal fisheries as being of social, economic and environmental interest for the country, compared to other sectors that have a greater impact on the resources.
3. The 2011 State of the Nation report clearly mentions that the Costa Rican State does not have the capacity either to implement necessary actions to ensure that marine conservation initiatives deliver well-being for coastal communities, or to ensure that conservation of the resource base sustains their identity and culture.
4. International processes that had a bearing on this constitutional ruling as regards the shrimp trawlers and the regularization of the industrial fleets have not had any positive practical impact, given that most of the fleet has valid licences. For the moment, only those experiences that have succeeded in defining community governance of the sea with active participation of artisanal fishermen have managed to progress towards a balanced marine conservation that also seeks to improve well-being and quality of life.
5. The impacts of industrial trawling on marine conservation are as negative as the social impacts caused by conservation policies that exclude people. The country should redefine its social, economic and environmental objectives for marine conservation in order to move forward on a wider front that genuinely promotes a more equitable distribution of marine resource use. The importance and need for attention of a vulnerable artisanal fisheries sector should be recognized, considering the threats of extinction from an exclusive and neoliberal development model.
6. Monitoring is needed at national and international levels, so that the effects of marine conservation and the quality-of-life improvements for human populations living in coastal marine zones can be measured, both as real and positive indicators of sustainable development.

For more

www.ticotimes.net/More-news/News-Briefs/Costa-Rica-bans-shrimp-trawling_Thursday-August-08-2013
Costa Rica Bans Shrimp Trawling

www.incopesca.go.cr
Costa Rican Institute of Fisheries and Aquaculture

Celebrating Fisheries

The World Fisheries Day, which specifically recognizes the role of small-scale, artisanal fishers and fishworkers, was celebrated in myriad ways around the world

At a meeting in New Delhi, India, on 21 November 1997, during the formation of the World Forum of Fish Harvesters and Fishworkers (WFF), fisherfolk and their supporters from around the world declared that day as World Fisheries Day (WFD). Since then they have continued to recognize 21 November as a special day. Following that tradition, this year small-scale, artisanal fishers and fishworkers gathered in different places around the world to highlight the urgent need to protect fishery resources and secure access to them, while also recognizing the low-impact nature of the activities of the small-scale, artisanal fisheries sector.

In one voice, they complained of how States continue to overlook or marginalize small-scale fisheries, while supporting large-scale fisheries that adversely impact the environment, provide fewer jobs and offer a less equitable distribution of benefits.

LIFE's objective is to represent, support, develop and defend low-impact fishing operations in coastal waters.

At the first European Artisanal Fishermen's Congress, held on 18 November 2012, participants had come together to discuss their plight and to petition decisionmakers in the European Union (EU) to protect their livelihoods, communities and heritage.

They emphasized that for Europe's fisheries to thrive, the new Common Fisheries Policy (CFP) needs to stop unsustainable fishing and place artisanal and low-impact fishers at the centre of Europe's fishing future.

They called on EU decisionmakers to grant the right to fish to those who fish sustainably; to reduce fleet overcapacity where it exists, while preserving jobs in artisanal, low-impact fisheries; to end harmful subsidies and unsustainable and destructive practices; and to restore the health of the seas in Europe and the rest of the world.

They declared that they want to leave a legacy of healthy seas and oceans in a world where there is less, but better fishing; they want their children to fish in healthy oceans full of thriving fish stocks; they wish to eat fish of better quality than what most people consume today; and, as stewards of the marine environment, they demanded that their collective voices be heeded before it is too late.

At the second European Artisanal Fishermen's Congress, held during 22 - 23 November 2013, in Santiago de Compostela, Spain, around a hundred fishers and fishworkers—men and women—gathered to give birth to Low-impact Fishers of Europe (LIFE), a new body launched to fight for the rights of small-scale fishworkers.

LIFE's initial membership is from fisher organizations that represent more than 1,000 fishers and fishworkers from France, Spain, Greece, the United Kingdom, Netherlands, Poland, Germany and Croatia.

Low-impact fishing

LIFE's objective is to represent, support, develop and defend low-impact fishing operations in coastal waters. Its members have agreed to be bound by a requirement to fish responsibly, without damaging the

*This article has been compiled by **Sumana Narayanan** (sumananarayanan@gmail.com) and **Brian O'Riordan** (briano@scarlet.be) of ICSF, based on inputs from fishworker organizations in Asia, Africa and Europe*

marine environment, to use selective fishing gear and to avoid catching undersized fish.

Maria Damanaki, the European Commissioner on Maritime Affairs and Fisheries, has expressed her support for this initiative both in writing and in a video message to the Congress. During the Congress, Joost Paardekooper, European Commission Policy Officer, spoke of the options available for the small-scale European fleet in the new CFP. The measures, he said, recognize the benefits of the small-scale fleet to local communities and their low environmental effects. In France, WFD was celebrated in the maritime town of Sainte-Pierre-Quiberon in south Brittany on 22 and 23 November at an event organized by the Lorient-based non-governmental organization (NGO) Pêche et Développement, which has been hosting events around the WFD since 1997.

This year, one of the themes chosen for the event was "Social Issues in Fisheries and Colonization of the Oceans". Problems facing young people entering the fisheries, sea safety and health were also discussed. Older fishers looking to retire also face a dilemma about whether they should they sell their boats (average age: 27 years), licences and quotas so they can enter into comfortable retirement or whether they should bequeath their old boats to their children.

The discussions focused on the threat to fishing livelihoods from the new colonizers of the oceans and "ocean grabbing". Alain le Sann, one of the founders of Pêche et Développement, made a presentation highlighting the role of such players as the World Bank, rich foundations connected to big business interests, some United Nations bodies, government functionaries and large, often multinational, environmental NGOs. These are now working in an alliance, the Global Partnership for the Oceans (GPO), under the direction of the World Bank. The GPO, and such related initiatives as "50 in 10", Oceans 5 and others aim to privatize access to marine resources and to coastal areas through "rights-based management" in the name of conservation and profits. This is nothing less than "ocean grabbing" that favours the rich at the expense of the poor.

The Bangladesh Fish Workers Alliance (BFWA) organized a rally and discussion in five districts of the country. The participants, numbering 4,000, included activists, students and others engaged in fisheries.

The Bangladesh campaign stressed the role of fisheries and the significance of WFD. It also focused on specific issues relating to minimum wages for fishworkers, health, education, housing and credit.

The discussions focused on the threat to fishing livelihoods from the new colonizers of the oceans and "ocean grabbing".

In the southern Indian State of Kerala, the Kerala University of Fisheries and Ocean Sciences (Kufos) held a rally and a public conference in which fishery scientists, activists and members of fisher organizations participated. This was followed by a public conference where government officials spoke of the need to improve breeding technologies to allow fishers to go beyond dependence on capture fisheries. The administration of the Union Territory of Puducherry, India, announced it would set up a Fishermen Development Corporation.

In West Bengal, India, 6,000 fishers, under the auspices of the fisher organization, Dakshinbanga Matsyajibi Forum, gathered to protest against the setting up of a nuclear power plant at Haripur. They also demanded rights to land, fishing and social security, as well as a total ban on trawling.

Fish Festival

In Arunachal Pradesh, India, the government announced at the two-day "Meen Mahotsava" or "Fish Festival" organized on the occasion of WFD that it will amend all

ANDRE STANDING

Fishworkers and their supporters in Kilifi, Kenya, taking out a march to celebrate World Fisheries Day

MD. MIZANUR RAHMAN

A human chain rally organized at Bhola, Bangladesh, by the Bangladesh Fish Workers' Alliance (BFWA)

PFF

The Pakistan Fisherfolk Forum (PFF) observed World Fisheries Day through rallies, workshops and public meetings

FRANCISCO J MARÍ

World Fisheries day celebration meeting at Praia, Cape Verde

FRANCISCO J MARÍ

Mamayawa Sandouno, President of ADEPEG - CPA, Guinea Conakry, and Member, ICSF, speaking at the Praia meeting

PRADIP CHATTERJEE / NFF

The Dakshinbanga Matsyajibi Forum of West Bengal, India, observed World Fisheries Day at Haripur

memorandums of agreement (MoAs) with developers of hydroelectric power projects. The amendments would require developers to release fish seeds in the reservoirs. The aim is to encourage local fish farming and promote sustainable development of the community.

The Pakistan Fisherfolk Forum (PFF) celebrated WFD with a public gathering at Al-Ghazi Jeti in Ibrahim Hydri, Karachi. PFF and fishers' representatives voiced their concerns about human-rights and security issues relating to surveillance by the coast guard, pollution of water bodies, land-grabbing and arrests of fishers for transboundary transgressions of maritime boundaries. Muhammad Ali Shah, the PFF chairperson, spoke of the UN Convention on the Law of the Sea (UNCLOS), according to which fishers cannot be arrested for crossing into another country's waters. There was also a suggestion for a "Common Peace Area" of 50 nautical miles where fishers from India and Pakistan may fish freely on the basis of "no-objection" identity cards issued jointly by both countries and where fishing vessels display a Common Peace Area flag.

Pollution and destruction of coastal habitats force fishers to go farther offshore in their inadequately equipped boats, endangering lives.

In Sri Lanka, the fishing community joined hands with victims of land grabbing to commemorate World Fisheries Day under the theme "The owners of the sky, land and water are those who live and survive on them".

Participants from Jaffna, Mannar, Trincomalee, Baticaloa, Ampara, Mathara, Galle, Kaluthara, Gampaha, Puthlam coastal districts and the two inland districts of Polonnaruwa and Kurunegala gathered at Negombo on 21 November for a meeting organized by the National Fisheries Solidarity Movement (NAFSO).

The meet noted that, around the world, fishers suffer losses due to natural calamities such as typhoons. They also have to contend with plans to force them away from their traditional areas, on which they depend for their livelihoods. Such displacement arises from development projects related to tourism, aquaculture, special economic zones and industrial fishing. The participants at the Negombo meet reaffirmed their commitment to protect the rights of fishing communities.

A statement from the Pontifical Council for Migrants and Travelers of the Vatican, Rome, was issued ahead of WFD, which noted that most of the victims of the recent typhoon in the Philippines were fishermen who lost families, homes and livelihoods. The statement noted that within the industrial fisheries, employment contracts are incomplete or illegal, salaries are inadequate, and vessels lack minimum safety requirements on board.Pollution and destruction of coastal habitats force fishers to go farther offshore in their inadequately equipped boats, endangering lives.

The Council renewed its appeal to all governments to ratify, as soon as possible, the International Labour Organization (ILO) Work in Fishing Convention, 2007 (No. 188) to ensure safety at work to those employed in fisheries, and to ensure medical care, sufficient hours of rest, the protection of a contract of employment, and the same social benefits enjoyed by workers on shore.

In Kenya, the Community Action for Nature Conservation (CANCO) organized an event in Kilifi to mark WFD. Around 300 persons attended the event. Members of fishing communities from Kilifi, Malindi and Lamu gathered for a procession through Kilifi town that ended in a prominent fish landing site.

Beach management units

Presentations on small-scale fishers and fishworkers were made by members of various beach management units (BMUs) from these regions. The minister of fisheries made a concluding speech about the

importance of fishers for the food security of Kenyans.

On 20 November a meeting was organized in Kilifi by CANCO and CFFA in which the role of the media in fisheries in East Africa was discussed.

Fifteen participants, including journalists from Somalia, Kenya and Tanzania, debated the opportunities for stories on coastal communities, including those related to oil and gas production, foreign fisheries access arrangements and the use of development aid.

The Katosi Women Development Trust joined the fisherfolk at Nangoma landing site in Mukono district of Uganda on the 21st of November to celebrate WFD, an event co-ordinated by 3 of KWDT's women's groups from this fishing community. The celebrations brought together over 300 people, including men, women, children and local leaders from the district and subcounty levels.

For many, it was the first time they were hearing about WFD. The event gave local communities an opportunity to share their challenges and highlight their dependence and commitment to protecting fishery resources. Issues of fishing using illegal gears, the need for infrastructure (health, sanitation at landing sites), illegal 'tax' collection by government employees and land grabbing by landlords while local people are evicted from the lakeshore were highlighted.

For the third consecutive year, WFD celebrations were organized by the African Confederation for Professional Artisanal Fishworkes (CAOPA), which gathered members from 16 countries. This year's event took place in Cape Verde's capital city, Praia, where it was hosted by the Network of Organizations of Professional Artisanal Fishworkers (ROPA) of Cape Verde. Attending the event were representatives from Tunisia, the Republic of Guinea, Guinea Bissau, Benin, Liberia, Congo, Togo, Sierra Leone, Senegal, Mauritania, Burkina Faso, Gabon and the Ivory Coast as well as the host country, Cape Verde. The event was also attended by representatives of the journalists' network for responsible fisheries in Africa (REJOPRAO), the Sub-regional Fisheries Committee of the Food and Agriculture Organization of the United Nations (FAO), the International Collective in Support of Fishworkers (ICSF), the Coalition for Fair Fisheries Arrangements (CFFA), the Masifundise Development Trust, the Swedish Society for Nature Conservation and Bread for the World.

The Praia Statement, issued at the conclusion of the event, highlighted the impact of climate change, noting that at least 250 mn people in Africa will be affected by 2020, especially those in densely populated coastal areas where sea level rise is likely to have the greatest impact. Climate change is already impacting coastal communities through extreme weather events and changes in fish stock distribution.

The Statement noted that artisanal fisheries are more likely to be impacted as they depend on coastal waters which are ecologically fragile and are increasingly being threatened by development of non-fishery activities. The critical role of women in the sector was also highlighted.

For more

www.pff.org.pk
Pakistan Fisherfolk Forum

www.facebook.com/pages/World-Fisheries-Day-November-21/141778879204555
World Fisheries Day

www.nafso-online.org/2013/11/world-fisheries-day-2013.html
NAFSO World Fisheries Day 2013

FISHER LEADER

S Thavaratnam 1940 - 2013

S Thavaratnam, who passed away on 2 July 2013, was a towering leader of fishermen in nothern Sri Lanka

AHILAN KADIRGAMAR

S Thavaratnam was an outstanding leader of the fishermen of northern Sri Lanka

For over four decades, S Thavaratnam, who passed away on 2 July 2013, provided outstanding leadership to the fishermen of the Northern Province of Sri Lanka, leading them through a turbulent period including a 26-year civil war and the Indian Ocean tsunami of December 2004.

Thavaratnam was born in 1940 in Mylitti, a fishing village in Jaffna District famous for its skilled fishermen and thriving fishery. Unlike most of his contemporaries, Thavaratnam did not enter fishing as a youngster. Encouraged by his father, an active fisherman, Thavaratnam completed his schooling with flying colours. However, after he got married, Thavaratnam found it difficult to make ends meet and soon gave up his government job to start a fish business in the early 1960s.

...provided outstanding leadership to the fishermen of the Northern Province of Sri Lanka, leading them through a turbulent period that included a 26-year civil war...

That was a period of growth in Sri Lankan fisheries, with major State investments in new technologies—fibre glass boats, nylon nets and outboard motors. The Northern Province, with the shallow Palk Bay on the west and the rich Pedro banks in the north, was the powerhouse of Sri Lankan fisheries, contributing over a third of the country's total fish production. Thavaratnam's business also prospered. Gurunagar, the village his wife came from, to which he had moved after marriage, had a strong fisheries co-operative established by some pioneers from the community in the 1950s. Thavaratnam began to engage in its activities. This was also when he developed close contact with Indian fishermen leaders and organizations across the Palk Bay. There were the odd conflicts with Indian fishermen but these were exceptions in a context of close cultural links and co-operation. Thavaratnam also got involved in organizing the exchange of nets lost by fishermen on both sides. Periodical exchanges of nets were organised in Katchativu, the island in the middle of the Palk Bay, where both groups met routinely as part of their fishing operations.

By the start of the civil war in 1983, Thavaratnam was one of the leading lights of the co-operative movement in the Northern Province, having risen through the ranks to become an office bearer at the level of the union and, subsequently, in the Northern Province Co-operative Federation. The protracted war saw the breakdown of communications between the districts of the Northern Province, making it difficult to sustain a single co-operative federation for the entire area. A separate federation was formed for Jaffna district and Thavaratnam was elected its chairman in 1995, a position he held till about a year before his death.

Co-operative

The war period saw the co-operatives having to play a sensitive balancing act between the government and the Liberation Tigers of Tamil Eelam (LTTE) in order to ensure that the fishermen could pursue their livelihoods against great odds, including fishing permits, fuel rationing, time-and-distance

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restrictions and high-security no fishing zones whenever active warfare was not directly taking place in their respective areas. The co-operatives also had to deal with the aid and relief agencies which came forward to help in rehabilitation, especially after the 2004 tsunami.

While fisheries co-operatives were established all over the Sri Lankan coast during the 1960s and became vehicles of State-sponsored fisheries, it was in the Tamil areas of the north and the east that co-operatives continued to thrive evenafter that growth phase. While the reasons for this phenomenon have not been properly researched or fully explained, there can be no doubt that leaders like Thavaratnam contributed to the co-operatives becoming more than mere economic collectives and functioning as representative bodies of the entire fishing community in their areas of operation, often cutting across religious divisions. The co-operatives play a crucial role in local fisheries governance and the social life of the village.

Thavaratnam's educational background helped him communicate effectively with different levels of governance and deal with all kinds of outsiders and represent fishing-community interests effectively. Soft-spoken and courteous to a fault, he was also tough and firm with his own fishermen. He did not believe in populism and always insisted on a principled approach to all matters and discipline in day-to-day functioning. His leadership in business was conservative—safety and prudence being the watchwords—but forward-looking. The Jaffna federation managed to develop its own funds and acquire property in the heart of the town, which gave it considerable financial autonomy and strength. Thavaratnam dealt with fisheries conflicts —whether they be between groups in Jaffna or between Indian and Sri Lankan fishermen—in a balanced and non-partisan manner.

Post-war, Thavaratnam was keen on re-uniting the fishermen of the Northern Province under one umbrella. He achieved some success through the Northern Province Fisher Alliance which brought together the co-operatives of three districts—Mannar, Jaffna and Killinochi. However, post-war political dynamics and State policies created internal differences within the co-operative's leadership, and Thavaratnam found it difficult to keep the entire flock together, given his unwillingness to make concessions and compromises. The small fleet of trawlers, a pre-war legacy, which was based in Gurunagar had been kept non-operational due to Thavaratnam's strong stand against trawling. He was always concerned about sustainability of fish resources and would not agree to the use of any gear that would affect that. While Thavaratnam was pre-occupied with larger issues, the local trawler owners of Gurunagar ganged up and managed to unseat him from the presidency of the Gurunagar co-operative, making his continuation as head of the Jaffna Co-operative Federation untenable, forcing him to step down. Not disheartened, Thavaratnam decided that this gave him the time and opportunity to strengthen the northern alliance. Unfortunately, ill health intervened and the last few months saw him in and out of hospitals. Yet when death came, it was sudden and unexpected.

Thavaratnam will always be remembered as an exceptional leader who stood by his people during difficult times and never compromised on his principles and integrity. Remarkably, despite the new trends in the last few years, he did manage to get the large co-oprative membership to live up to the standards he set for them, putting a premium on honesty, decency and decorum.

For more

www.lankashrimp.com/?page=organization-page.php&id=2
Ministry of Fisheries, Sri Lanka

www.himalmag.com/component/content/article/279-sri-lankas-most-war-affected-community.html
Sri Lanka's Most War Affected Community

Debating Aquaculture

The FAO's Committee on Fisheries' Sub-committee on Aquaculture recently discussed issues related to aquaculture development

The Seventh Session of the Committee on Fisheries' Sub-Committee on Aquaculture (COFI SCA) of the Food and Agriculture Organization of the United Nations (FAO) was held at St Petersburg, Russian Federation, during 7 – 11 October 2013.

The issues debated were the work priorities of the Sub-Committee on Aquaculture (SCA) and the roadmap for the future, the Global Aquaculture Advancement Partnership (GAAP) Programme (Agenda Item 6) and the draft Terms of Reference (ToR) of the Advisory Working Group on Genetic Resources and Technology (Agenda Item 4).

On Agenda Item 6—the draft strategic framework strengthening the role of the COFI SCA in advancing aquaculture development—Germany, on behalf of the European Union (EU), and Norway stressed the need to strategically prioritize the sub-committee's work, based on the Plan of Action agreed upon at the previous session of the sub-committee in South Africa. It was felt that the documents in front of the Seventh Session did not help prioritize work. This issue was raised by European countries several times, and supported by Chile, which said that the SCA's work needs to include small-scale aquaculture, which is linked to poverty alleviation.

...Germany, on behalf of the European Union (EU), and Norway stressed the need to strategically prioritize the sub-committee's work...

In addition, GAAP, conceptualized by the FAO as a means to generate extra budgetary resources through strategic partnerships with private players, came in for a lot of discussion. The connection between the sub-committee and GAAP was unclear to several countries (notably, Chile, Russia and Argentina) and it was felt that the information provided did not clarify matters. Chile also suggested that GAAP could be developed through regional organizations. The Bay of Bengal Programme, an inter-governmental organization, requested GAAP to promote regional partnerships, especially South-South co-operation, looking at livelihood options that are an alternative to capture fisheries.

Noting that regional networks, such as the Network of Aquaculture Centres in Asia-Pacific (NACA), are important, India called for further strengthening of such networks. India also suggested that South Asia, as a leading producer of aquaculture, could take the initiative in this matter.

Agenda Item 6 came up for discussion in the afternoon of the first day of the session. During lunch on the second day, Brazil, Chile and Argentina were seen talking to delegates about the item.

One agenda item

During the post-lunch session, Chile suggested that since the sub-committee had only one agenda item left (the SCA had managed to deal with several items on the second day, leaving it ahead of schedule), the discussion on Agenda Item 6 should be re-opened on the morning of the third day. This was supported

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by Norway, Canada, the United States and Germany. Thailand, however, expressed surprise at the request to re-open the discussion but added that perhaps member(s) could suggest a roadmap for the future.

The next day, Canada, Germany (on behalf of the EU) and Norway stressed that some sort of roadmap for the next two years be developed before the end of the session. Canada pointed out that there were many issues but not enough money, so there was a need to deliberate on how to secure funds and use them wisely.

Canada suggested that the SCA commit to a draft plan to be given to members six months before the Eighth Session in Brazil. This plan should have rationale-oriented strategic priorities that are linked to FAO priorities. It should provide a timeframe for implementation.

However, Thailand, Sri Lanka, Vietnam, Indonesia, Korea and India said they needed to consult their governments and wondered why, when workshops and meetings have been scheduled to push forward regional plans, a separate roadmap was needed.

In the end, it was agreed that strategic priorities could be developed for each region and, therefore, regional workshops could be the way forward for this.

While, in general, there was praise for FAO's efforts at implementing the recommendations of the past sessions, there were requests from Kenya and Namibia for continued support for certain programmes such as setting up of biosecurity protocols.

The draft ToR for the Advisory Working Group on Genetic Resources and Technologies was put up for discussion and approval. This group had been set up last year at the Sixth Session in South Africa, to advise the SCA on matters concerning aquatic genetic resources and technologies and enhance international co-operation on them.

Several countries, like India, Norway, Thailand and Japan, supported the formation of the advisory working group and its ToR. However, Honduras noted that while the advisory working group was important, a paradigm shift in approach is needed in terms of an ecosystem approach to aquaculture which it has been attempting to implement. Of the eight countries that spoke about the advisory group, only three wanted changes and clarifications on the ToR. Germany, on behalf of the EU, pointed out that though the advisory group's name mentions genetic technology, the ToR does not. Germany also noted that the EU feels it is premature to include genetic modification within

FIRA / FAO

Plenary of the FAO COFI Sub-Committee on Aquaculture Seventh Session, held at St Petersburg, Russian Federation, during 7 - 11 October 2013

the scope of this working group. The EU was concerned that consumers are not ready for genetically modified fish.

Argentina, supported by Venezuela, pointed out that at the last session of the SCA, there had been talk of developing countries gaining access to genetic engineering technology; this ought to be added to the ToR, Argentina said. The Secretariat noted that access to technology is part of the scope of the working group. However, considering the requirements of space and latitude, there was no need to limit or specify particular issues though they can be added to the ToR if needed.

The EU also expressed concern about the negative consumer image of the nutrition level of farmed fish compared to wild-caught fish.

Eight countries and a non-governmental organization (NGO) spoke on Agenda Item 5: Progress reporting on the implementation of the Code of Conduct for Responsible Fisheries (CCRF) provisions relevant for aquaculture and culture-based fisheries using the new reporting system.

Countries have been reporting the implementation of the CCRF through a standard questionnaire. In 2009, a new questionnaire specific to aquaculture, to supplement the aquaculture section in the earlier tool, was developed. The Secretariat informed the sub-committee that only 37 per cent of member countries responded to the new questionnaire, but these countries account for 90 per cent of aquaculture production globally. The conclusion was that the questionnaire is a good tool for self-assessment in spite of some over-scoring in policies and planning. Norway and Canada felt a little more experience in using the questionnaire is needed before any changes are made to the reporting system. Germany argued for Web-based systems and training modules on the reporting system. The World Animal Health Organization, an NGO, offered to conduct reviews on animal health and sanitary standards, if members desired.

On Agenda Item 7: Evaluation framework for assessing conformity of public and private certification schemes with the FAO technical guidelines on aquaculture certification, Germany, on behalf of the EU, said that the evaluation framework for certification was of importance to the EU.

In a study, consumers had indicated that they were concerned about environmental impacts of the food they eat but the high price, low availability and lack of information of such "ecofriendly" food was an issue. The EU noted that 25 per cent of consumers were aware of the idea of certification; consumer perceptions had to be included in the certification process, it added.

The EU also expressed concern about the negative consumer image of the nutrition level of farmed fish compared to wild-caught fish.

Canada hoped that the evaluation framework for certification would be accepted by member countries. Country reports were due by the end of 2014, and Canada was concerned that the scope of the country reports was limited. Russia also raised the issue of consumer awareness of nutritional aspects of farmed fish, saying that work needs to be done to stress that farmed fish does not lacking nutritional value.

Trade barrier

Morocco highlighted its concerns in meeting EU requirements on management and health standards. Brazil, Argentina, Bangladesh and India noted that the evaluation framework could become a trade barrier. Norway said that while it understood these concerns, the evaluation framework was meant to reduce the risk of the guidelines becoming a trade barrier and, therefore, the framework should be endorsed. Russia, while approving the framework, said it reserved the right to propose changes once

countries have had some experience in using it. China and Thailand said that the framework could be used not just to evaluate private certification systems but also for producer countries to develop their own certification schemes. Brazil expressed concerns about the impact of the framework and the guidelines on low-input aquaculture.

Agenda Item 8 on applying spatial planning for promoting future aquaculture growth was welcomed by several countries. Norway noted that it should be done at the lowest level of government, to reduce conflicts.

Norway also introduced a note of caution on using Web- and computer-based tools, pointing out that these should not replace actual assessments.

Russia said the document was timely and useful but it would like to see a compilation of best practices. India noted that spatial data was hard to acquire, and climate-change impacts should be considered during spatial planning.

Norway and the US said they would have liked to see how spatial planning enables the SCA to meet the strategic goals of FAO.

Agenda Item 9 on the role of aquaculture in improving nutrition and the opportunities and challenges offered, again raised the issue of the nutritional value of farmed fish vis-a-vis wild fish. There was general agreement that there is no nutritional difference (as proven by studies) but consumers continue to be biased against farmed fish.

India mentioned how it is reducing the use of fish oil in shrimp feed. India also highlighted the importance of small-scale fisheries and small-scale aquaculture in poverty alleviation, food security and nutrition. India pointed out the importance of small-scale aquaculture for rural development in providing livelihood opportunities, and in improving social equity and food security. The needs of small-scale aquaculture producers need to be identified, documented and supported. India also noted that there are currently no specific social standards for aquaculture. Guidelines on aquaculture certification should include standards and guidelines for working conditions and social protection. India urged the SCA to request the International Labour Organization (ILO) to undertake a study on these aspects, both in large- and small-scale aquaculture, and to develop standards and guidelines in consultation with FAO.

Agenda Item 10 on the role of the SCA in promoting culture-based fisheries saw discussion on definitions. Germany felt that culture-based fisheries must fall under fisheries since it does not fit the EU definition of aquaculture. India agreed that some universal definition of culture-based fisheries is required. India also drew attention, in paragraph 10 of the agenda document (which lists management issues), to the need to support/draw attention to the rights of traditional fisheries and also the need to look at the International Guidelines on Small-scale Fisheries (IGSSF) being developed by FAO.

Norway wondered whether the carrying capacity or normal stocking intensity should be considered in management and said that a serious risk assessment is needed if any species are to be introduced. Germany, speaking on behalf of the EU as well, and Norway said that restocking in natural waters is a growing concern and expert consultation on the matter would be useful.

There was also discussion on the issue of standardized and improved reporting of production from culture-based fisheries. The agenda document noted that reporting is inconsistent; some members report activities as falling under aquaculture while others report them under culture-based fisheries. China noted that it is difficult to separate aquaculture and culture-based fisheries and asked what the data collected was going to be used for.

The next session of the SCA—held every two years—will be held in Brazil, which took over as Chair.

For more

www.fao.org/news/story/en/item/202782/icode/
Co-ordinated Efforts in Aquaculture Needed to meet Global Demand

www.fao.org/cofi/aq/en/
Sub-committee on Aquaculture

DEEP-SEA TRAWLING

The destructive nature of deep-sea trawling (infographic)

While some may celebrate World Fisheries Day on November 21, at One Green Planet, we feel that it's a great time to really evaluate the toll that fishing takes on the environment.

It is estimated that over 70 per cent of all marine fisheries have been exploited, overexploited or have fully collapsed, and 90 per cent of vital ocean apex predators have disappeared.

There are a number of reasons that these saddening statistics exist. They include the death of animals caught in bycatch, fishery mismanagement, overfishing, unregulated fishing and habitat destruction.

Aside from shark finning, the dolphin slaughters in Peru and Japan, and "scientific whaling" (as the Japanese government insists it is, but we all know better), deep-sea trawling has one of the most destructive effects on the marine ecosystem.

Check out the infographic at http://www.onegreenplanet.org/animalsandnature/the-destructive-nature-of-deep-sea-trawling-infographic/.

It offers an easy-to-understand overview of the damaging effects of this fishing practice.

The infographic was originally posted on Penelope Bagieu's blog and translated by Le Huffington Post.

The graphic was then subsequently published in its translated version on The Huffington Post.

Source: One Green Planet

FRESHWATER SPECIES

Fish that lay eggs out of the water

The fish *Copella arnoldi* is commonly called the splash tetra or splashing tetra, due to its unique reproductive behavior. That is, it lays its eggs outside water. It is one of few species of fish in the world known to do so.

When a male is ready to mate, it takes up position in the water below an overhanging leaf. It does a little display, and if a female is interested, she will sidle up to him. Then, they will leap out of the water together. They latch unto the underside of a leaf with their fins.

The female releases six to eight eggs and the male quickly fertilizes them, before they fall back into the water. The pair repeat this process several times until they have deposited about 200 eggs onto the leaf.

The male then hides in aquatic vegetation near the leaf, where he keeps an eye on the eggs.

He defends the territory and periodically splashes the eggs with his tail fin (which is asymmetrical, most likely for this purpose) to keep them moist.

When the fry hatch, after about 48 hours, they fall into the water, where they hide as best they can.

Splash tetra live in slow-moving tributaries of the Amazon and other large South American rivers, especially in Guyana and Venezuela.

The fish grow to a length of about 2.7 in (7 cm) and have a life expectancy of about three years.

Source: *National Geographic* (http://newswatch.nationalgeographic.com/2013/09/27/fish-that-lay-eggs-out-of-the-water-freshwater-species-of-the-week/)

ORGANIZATIONAL PROFILE

ATDEPA: The Tunisian Association for the Development of Artisanal Fisheries

The Tunisian Association for the Development of Artisanal Fisheries (ATDEPA) is a civil society organization that brings together fisheries officials, scientific researchers and artisanal fishers. It was created in 2011 as a non-profit development association under Tunisian law. It is, therefore, not so much an organization of fishers, but, rather, an organization for fishers. ATDEPA conducts studies, organizes workshops, undertakes training, raises awareness and advocates for responsible fishing practices, amongst other activities.

The aim of ATDEPA is to improve the sustainable livelihoods of artisanal fishing communities, based on respect for the ecosystems that they exploit. ATDEPA also seeks to engage positively with fishing communities to help them improve their activities, notably through fisheries management and coastal-zone development.

ATDEPA's mission is to engage in defining fisheries policy in ways that include: the responsible participation of artisanal fishers in the sustainable management of coastal ecosystems on which

ATDEPA

their livelihoods depend; and further understanding the socioeconomic and demographic characteristics of the fishery system so as to identify approaches to fisheries management relevant to the Tunisian context.

In Tunisia, artisanal fishing is seen as a semi-subsistence activity, employing traditional fishing methods and keeping within environmental limits. The government has provided both legal and financial frameworks to develop the sector into a semi-industrial sector. Today, artisanal fishing employs 70 per cent of the people active in fishing —around 42,000 people—and lands around 50 per cent of the catch by value. Women comprise around three per cent of the workforce in fishing, mainly as shellfish collectors.

ATDEPA is a partner in a number of local, regional and international initiatives. These include an innovative project to promote sustainable fishery products from the Cap Negto-Cap Serrat protected coastal and marine area, financed within the framework of the Italy-Tunisia IEVP CT technical co-operation transboundary partnership programme, involving regions of Sicily and Tunisia.

ATDEPA is also a partner in an initiative to establish a North African platform for associations and organizations of professionals in the agriculture and artisanal fisheries sectors. This initiative is supported by the Regional North African programme of the Food and Agriculture Organization of the United Nations (FAO) and by the WWF North African Office, and was launched in September 2013.

ATDEPA is a member of the African Confederation of Professional Organizations of Artisanal Fishers (CAOPA) and the World Forum of Fish Harvesters and Fishworkers (WFF). The organization has participated in various West and North African regional meetings, and joined the WFF delegation to the intergovernmental Technical Consultations organized by FAO to negotiate content and text for the International Guidelines to Secure Sustainable Small-scale Fisheries in the context of food security and poverty elimination.

For more information (in French): http://artisanalfishing.org.tn/presentation/

Global Aquaculture Production Statistics

According to data newly released by the Food and Agriculture Organization of the United Nations (FAO), world aquaculture production of food fish reached 62.7 mn tonnes in 2011, up by 6.2 per cent from 59 mn tonnes in 2010. The estimated value of farmed food fish is US$130 bn. Farmed aquatic algae production in 2011 was 21 mn tonnes, worth $5.5 bn. The 2010 world production level in the new data release is lower than in the previous data release, due largely to the downward adjustment of 2010 production by India, the world's second-largest aquaculture producer. Aquaculture contributed 40.1 per cent to the world total fish production and almost all the seaweed production (see Table 1).

In 2011, Thailand and Japan suffered from great losses caused by catastrophic natural disasters. Thai aquaculture production dropped by 0.28 mn tonnes (22 per cent) from its 2010 level, and Japan by 0.16 mn tonnes (23 per cent). A few other global major producers, such as Myanmar, the United States (US) and Malaysia, and regional major producers, such as Uganda, also experienced negative growth in aquaculture output in 2011 due to various reasons. But the majority of producing countries and regions enjoyed positive growth in aquaculture production in 2011.

Globally, the status of statistics reporting to FAO on aquaculture is a mixed picture. While many members continued to improve national statistics collection and reporting, the number of non-reporting countries increased among European Union members, and a few major producers continued to ignore their data reporting obligation. The nature of 2011 aquaculture data in the new release are of four major types:

- reported by national authorities in responding to FAO data questionnaires;
- retrieved (with statistics details) from government sources for the non-reporting or incomplete-reporting countries;
- retrieved (with total production without breakdown details) from government sources, and estimated by FAO for splitting to the major cultured species or species groups using additional information, for the non-reporting countries; and
- estimated, using information available from other sources, for non-reporting countries.

In 2011, the top 20 producers who produced 95 per cent of world farmed food fish are China, India, Vietnam, Indonesia, Bangladesh, Norway, Thailand, Egypt, Chile, Myanmar, Philippines, Brazil, Japan, Korea (RO), US, Taiwan (POC), Ecuador, Malaysia, Spain and Iran. The improvement in the ranking position of Norway, Chile and Brazil among the top producers is noteworthy.

The number of cultured species registered as "species items" in the new data release further increased from 541 in 2010 to 559. They include 346 fin fishes, 62 crustaceans, 102 molluscs, six amphibians and reptiles, 34 aquatic algae and nine other aquatic invertebrates. Such an increase is more the result of data quality improvement than species diversification at the real production level.

The changes in world aquaculture production during 1970-2011 are summarized broadly in Table 2 below.

—Excerpts from *Global Aquaculture Production Statistics for 2011.* FAO

Table 1: Contribution of aquaculture to the world total fish production* (mn tonnes, excluding aquatic plants)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Aquaculture (mn tonnes)	34.6	36.8	38.9	41.9	44.3	47.3	49.9	52.9	55.7	59.0	62.7
Contribution to total (per cent)	27.6	28.8	30.6	31.1	32.4	34.4	35.5	37.0	38.2	39.9	40.1
Capture (mn tonnes)	90.7	91.0	88.3	92.7	92.5	90.2	90.7	90.1	90.0	89.0	93.5
Contribution to total (per cent)	72.4	71.2	69.4	68.9	67.6	65.6	64.5	63.0	61.8	60.1	59.9
Total fish production	125.4	127.8	127.2	134.6	136.8	137.5	140.7	143.0	145.7	148.0	156.2

* Total fish production includes production destined for human consumption and for non-food uses (such as reduction for fishmeal and oil, etc.).

Source: FAO

Table 2: World aquaculture production of food fish* by continent (mn tonnes)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Share in 2011 (per cent)
Africa	0.4	0.5	0.5	0.6	0.6	0.8	0.8	0.9	1.0	1.3	1.4	2.2
Americas	1.7	1.8	1.9	2.1	2.2	2.4	2.4	2.5	2.5	2.6	2.9	4.7
Asia	30.3	32.4	34.2	36.9	39.2	41.8	44.2	47.0	49.5	52.4	55.5	88.5
Europe	2.1	2.0	2.2	2.2	2.1	2.2	2.4	2.3	2.5	2.5	2.7	4.3
Oceania	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Total	34.6	36.8	38.9	41.9	44.3	47.3	49.9	52.9	55.7	59.0	62.7	
Annual growth rate (per cent)	6.8	6.3	5.8	7.7	5.7	6.8	5.6	6.0	5.2	5.9	6.2	

* Food fish = fishes, crustaceans, molluscs, amphibians, reptiles (excluding crocodiles) and other aquatic animals (such as sea cucumber, sea urchin, etc.) for human consumption.

Source: FAO

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

An Ecosystem Approach to Fisheries (EAF)
http://www.icsf.net/images/EAF_final_26Nov13_1.24pm.pdf

Small-scale Fisheries: Their Contribution to Food Security, Poverty Alleviation and Sustainability
http://www.icsf.net/images/ssf/SSF_BROCHURE_English.pdf

Draft Voluntary Guidelines for Securing Sustainable Small-scale Fisheries
http://www.icsf.net/images/ssf/ENGLISH%20_SSFguidelines_leaflet.pdf

Aguilar-Manjarrez, J. & Crespi, V. 2013.
National Aquaculture Sector Overview map collection. User manual. / Vues générales du secteur aquacole national (NASO). Manuel de l'utilisateur. Rome, FAO. 65 pp.

The National Aquaculture Sector Overview (NASO) map collection aims to assist FAO Members to inventory and monitor aquaculture, using Google Earth and Google Maps technology. The collection has the potential to be used for a number of purposes, such as monitoring the status of, and trends in, aquaculture development and addressing site selection and zoning issues. This user manual, available as a bilingual document in English/French, is meant to facilitate the completion of the Microsoft Excel form needed to create the NASO maps. The manual is intended for all FAO Members that report aquaculture statistics to FAO and to inventory and monitor aquaculture in their respective countries and territories. The NASO map collection is being developed by the Aquaculture Branch in collaboration with the Fisheries and Aquaculture Statistics and Information Branch of the FAO Fisheries and Aquaculture Department.

Source : FAO

Videos

Documentaries about Overfishing

This Web page is an overview of some of the best documentaries, movies and video shorts on overfishing and other harmful (for the fish, other wildlife, habitat and greater environment) fishing practices. Links go to the official website where available. Often these websites have trailers or even the full documentary in streaming video (follow the links labelled with "stream").

Source : http://overfishing.org/pages/Documentaries_about_overfish.php

Citizen Voices do Matter !

"Community-centred Governance Using Climate Change Score Card" is an attempt to encapsulate the experience of developing a social accountability tool called "climate change score card". The tool was developed through a project in the Gulf of Mannar, Tamil Nadu, India. This film documents the process of developing the score card.

Source: www.pacindia.org

FLASHBACK

Looking at aquaculture

Today, over 44 per cent of global fish production for direct human consumption originates from aquaculture. However, even as we recognize the potential role of aquaculture and mariculture in contributing to employment and food security, there are several questions that need to be answered: Can aquaculture and mariculture practices be undertaken without displacing farming and fishing communities, without destroying habitats, and without reducing biodiversity? Can aquaculture help to reduce pressure on coastal fisheries by providing alternative employment? Can it contribute to food security and

poverty alleviation? Can aquaculture ensure decent conditions of work and fair wages to the workers in the sector? Is there anything that can truly be called 'sustainable aquaculture'? These are some of the questions that are being asked by fishing, farming, and other communities in coastal and inland areas where aquaculture is being practised.

Undeniably, aquaculture has made rapid strides in increasing production during the last couple of decades. Analysts predict a future of continuing growth, intensification and diversification of aquaculture. Yet, disturbingly, there is very little conclusive information on the positive social and environmental impacts of aquaculture on rural communities. In such a situation, it is difficult for rural communities to take a position on aquaculture development. The countries that are investing in rapid development of aquaculture should ensure that aquaculture does indeed contribute to sustainable development, and that it does not leave in its wake an abused labour force, swathes of degraded mangrove forests, contaminated inland and coastal waters, threats to biodiversity from the introduction of exotic species, and destruction of natural habitats.

We would argue for a perspective that places fisheries and aquaculture within the framework of the human development of rural communities. In this context, aquaculture development should be subject to checks and balances to ensure that it is not reduced to a mere investment activity by a few who have access to capital and can thus extract all benefits of nature, at the expense of local communities and their livelihood options.

—— from the Comment in SAMUDRA Report No. 45, November 2006

ANNOUNCEMENTS

MEETINGS

Resumed Session of the Technical Consultation on International Guidelines on Securing Sustainable Small-scale Fisheries
3 - 7 February 2014, Rome, Italy

This session will review the draft International Guidelines for Securing Sustainable Small-scale Fisheries (IGSSF) being develop by the Food and Agriculture Organization of the United Nations (FAO)and also discuss the follow-up towards its implementation.

COFI - Sub-Committee on Fish Trade - 14th Session (FI-709-14)
24 - 28 February 2014, Bergen, Norway

WEBSITES

www.standardsmap.org
Standards Map is the web-based portal of ITC's Trade for Sustainable Development (T4SD) programme and a partnership-based effort to enhance transparency on voluntary standards and to increase opportunities for sustainable production and trade.

http://vdb.eurofish.dk/
A visual database of value-added products consumed in Europe. The website provides information on aquaculture and tuna products.

http://www.marineregions.org/
Maritime boundaries are important for many applications. In biogeography, for example, a layer of exclusive economic zone (EEZ)-polygons could be used for the creation of species distribution lists per country. Up to now, there is no global public domain cover available. Therefore, the Flanders Marine Institute decided to develop its own database.

The database includes two global IS-layers: one contains polylines that represent the maritime boundaries of the world countries, the other one is a polygon layer representing the EEZ of countries.

The database also contains digital information about treaties.

COOPESOLIDAR R.L.

Endquote

Ah the lovely morning! Away behind us the sun was just coming above the sea's horizon, and the sky all golden, all a joyous, fire-heated gold, and the sea was glassy bright, the wind gone still, the waves sunk into long, low undulations, the foam of the wake was pale ice-blue in the yellow air.

— from *Sea and Sardinia* by D H Lawrence