

Workshop on Emerging Concerns in Fisheries Child Labour in Fishing Tsunamis and Green Belts Rights-based Management in Fisheries Community-based Coastal Resource Management Lobster Fishery in Ceará, Brazil News Round-up

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This issue includes a supplement—*SAMUDRA for Fortaleza*, the special newsletter brought out during the "Emerging Concerns of Fishing Communities Workshop at Fortaleza, Brazil, in July 2006.

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Comment

No child's play

Fishing is considered one of the most dangerous occupations in the world. The employment of children below 18 years of age in hazardous fishing, therefore, is a matter of concern. Unfortunately, it is practised in several parts of the developing world, both in marine and inland fisheries.

Children help prepare the craft for a fishing trip; bail out water; help haul in the nets and clear them of fish; dive into the water to guide the fish into encircling seines; disentangle fishing nets from tree trunks in deep reservoirs; bait hooks, fish with handlines, and haul in longlines; help prepare meals for the crew of the vessels, and arrange the fish in the ice-boxes; and anchor and un-moor fishing vessels. They also guard the catch, equipment and crew belongings.

Bailing out fishing vessels can be a backbreaking job, especially on board a leaky pirogue. Diving deep down to drive fish into an encircling gear in a coral reef can damage eardrums. Bailing hooks or removing fish from hooks can injure hands or fingers. Guiding the fish into encircling gear can sometimes cause drowning; so too, removing fishing gear entangled on tree trunks. To our knowledge, no country maintains statistics on child mortality in fishing. There are only unconfirmed reports of such incidents.

Many fishing communities believe that children who master a profession early on, find work easily. However, there are many children who, due to socioeconomic and overfishing reasons, end up as workers in fishing. Many children in Senegalese fisheries, for example, are orphans, or their parents are so poor that they have to take up fishing to earn a livelihood. In Ghana, overfishing of coastal waters is said to be a main reason for children, especially girls, to be sold under bondage by their impoverished fisher parents to boatowners in the hinterland of Volta Lake, to undertake dangerous diving at night for fish.

Often, the work is carried out in abusive conditions. The children sometimes work up to 10 hours in one shift. They are beaten, physically abused or harassed. They are not given rest periods of sufficient frequency and duration for the safe and healthy performance of their work (see *Growing pains*, pg 8).

It should be ensured that children below 18 years of age, especially girls, are not employed in night fishing or in fishing operations that involve diving or swimming or work that involves manual handling and transport of heavy loads, and work for excessive periods of time. We consider all these as hazardous forms of fishing. In the case of non-hazardous fishing operations, the minimum age should be 15 years and the working hours of fishers above this age should not exceed eight hours per day and 40 hours per week, and they should not work overtime, except where unavoidable for safety reasons. While sufficient time should be allowed for all meals, fishers under the age of 18 should be assured of a break of at least one hour for the main meal of the day. These measures are proposed in the International Labour Organization (ILO) Work in Fishing Convention that will come up for adoption at the 96th Session of the International Labour Conference in June 2007. Urgent attention is needed to halt the exploitation of children in fishing, particularly where the work is hazardous, exhausting, and of long duration.

Fishing for insights

A recent international workshop at Ceará, Brazil identified emerging issues of concern for small-scale fishing communities

The year 2006 marks the 20th anniversary of the founding of the International Collective in Support of Fishworkers (ICSF), in India in 1986. In the two decades of ICSF's existence, the fishing sector, in general, and the small-scalefisheries-dependent communities, in particular, have been profoundly affected by many changes. At the same time, the small-scale sector itself has changed in many ways. It, therefore, appeared important and timely to organize an international workshop to take stock of significant developments in fisheries, and to identify emerging issues of concern.

It was against this background that the workshop on "Emerging Concerns of Fishing Communities: Issues of Labour, Trade, Gender, Disaster Preparedness, Biodiversity and Responsible Fisheries", was held from 4 to 6 July 2006 at SESC Colonia Ecologica in Fortaleza, Ceará, Brazil. (Ceará is home to an important artisanal fishery that has a long history of struggle against destructive fishing practices and inequitable policies.) The workshop, co-hosted with Instituto Terramar, was organized with the following objectives:

- Provide a forum for ICSF Members, fishworkers and others working in small-scale fisheries to share perspectives, and discuss and analyze recent developments of relevance to small-scale fisheries and fishing communities
- Explore possible future scenarios, and highlight actions needed to ensure a secure future for small-scale fishing communities
- Make recommendations, and otherwise enable the ICSF General

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Body (GB) to draw on these discussions to set the agenda for the coming period

Sixty participants from 18 countries of Latin America, Asia, Africa and Europe participated in the workshop. They included, besides ICSF Members, representatives of fishworker organizations (FOS) and organizations working to support small-scale fisheries in their respective countries.

At the opening session, ICSF Members from Brazil, Maria Cristina Maneschy of the University of Belem and René Schärer of Instituto Terramar, welcomed all participants. The ICSF Secretariat then provided a brief overview of ICSF's work over the last 20 years. This was followed by a session where seven founding Members of ICSF present at the workshop, reflected on the 20 years of ICSF, from different perspectives. Setting the tone for the workshop to follow, Nalini Nayak, ICSF Member from India, drew attention to the changed context today. "I am rather confused who the small-scale sector includes and what it represents. This is one of the challenges for us to redefine, with our fishworker friends, who we are going to support and for what in the coming years" she wondered.

First session

The first session on "Responsible Fisheries" started with a panel discussion on "Fisheries Management: Rights-based Fisheries and Implications for the Small-scale Sector". Sebastian Mathew of ICSF said it is important to consider whether property-rights-based fisheries are capable of meeting the objectives of management, fisheries such as conservation of fisheries resources. More fundamentally, he wondered whether property rights limited to a few would be Report

acceptable in countries with large fishing populations.

olf Willmann, Senior Fishery Planning Officer, Fisheries Department of the Food and Agriculture Organization of the United Nations (FAO), highlighted that rights are essential effective fisheries for management, and that decentralized and flexible community-rights-based systems need to be explored. Dao Gaye of Collectif National des **Pecheurs** Artisanaux du Senegal (CNPS) drew attention to present efforts in Senegal to regulate access by introducing access rights. John Kurien, Professor at the Centre for Development Studies, India, stressed the importance of institutional arrangements that go along with the granting of rights. Antonio Carlos Diegues, Professor at the University of Sao Paulo, Brazil, made reference to traditional community-based systems that promoted sustainable utilization of resources. The conservation agenda is, unfortunately, now being defined by the North, he said.

In her presentation on co-management, Nalini Nayak, an ICSF Member, pointed out that the responsibilities and costs of management initiatives are often largely borne by communities, and particularly by the women of these communities. In such a context, it is important to define 'stakeholders' and ensure that their interests are protected and their efforts rewarded. Cosme Caracciolo of Confederación Nacional de Pescadores Artesanales de Chile (CONAPACH) said that the introduction of individual transferable quotas (ITQs) has led to the privatization of fish resources in Chile. There is also clear evidence of stock depletion, he said, questioning the very rationale of the ITQ system. Ramon Agama Salas of Federacion de Integración y Unificación de los Pescadores Artesanales del Perú (FIUPAP), Peru, underscored the importance of effectively enforcing the artisanal zone to protect livelihoods in the small-scale sector and the resource base. The group followed discussions that the presentations concluded that it is important to improve management of fisheries resources, using measures that promote equity and sustainability.

The panel discussion on "Distant-water Implications for Fisheries: Fishing Communities" had representatives from Senegal, Guinea Conakry, Argentina, Chile and France. Dao Gaye from Senegal spoke about the participation of the artisanal sector during negotiations of fisheries access agreements with the European Union (EU), and said that on no account should foreign fishing fleets be allowed access to resources exploited by the artisanal sector. Governments need to address the social problems resulting from migration of fishers from neighbouring countries and poor people from rural areas, before thinking of fishing agreements with foreign distant-water countries, he said. He also drew attention to the problem posed by illegal fishing operations by foreign fleets.

Ernesto Godelmann of el Centro para el Desarrollo y la Pesca Sustentable (CeDePesca, the Centre for Sustainable Fisheries Development), Argentina, drew attention to the overexploitation of resources in Argentine waters, which resulted from fishing operations of European fleets fishing under access agreements. He further highlighted the poor labour conditions on board these vessels, and the gross violations of human rights. The issue of exploitative labour conditions on illegal fleets fishing in international waters off the southern coast of Latin America was also mentioned by Hector Luis Morales of the University of La Serena, Chile. Juan Carlos Cardenas of Centro Ecoceanos, Chile, flagged the issue of illegal, unreported and unregulated (IUU) fishing in international waters, and stressed the need to create the necessary political will to regulate the activities of such fleets. James Smith of the Observatory of Seafarers' Rights, France, provided information on cases of abandonment of crew of fishing vessels, and highlighted the need for greater international attention to this issue.

FAO guidelines

The presentation by Rolf Willmann of the FAO, on "Policies and Strategies for Increasing the Contribution of Small-scale Fisheries to Poverty Alleviation and Food Security" was based on the FAO Technical Guidelines for Responsible Fisheries on Increasing the Contribution of Small-scale Fisheries to Poverty Alleviation and Food

Security. Willmann drew attention to the renewed global recognition of small-scale fisheries, and outlined possible pro-poor policy, legislation and management approaches. He highlighted the importance of providing greater rights and access to fisheries resources, to reduce overcapacity in industrial fisheries and to establish effective co-management and community-based management regimes.

n the session on "Biodiversity and the Ecosystem Approach to Fisheries", Chandrika Sharma and Ramya Rajagopalan of ICSF discussed, in particular, the implications of the Protected Area Programme of Work of the Convention on Biological Diversity (CBD) for fishing communities. Even as there is international pressure to expand the area under marine protected areas (MPAs), non-participatory top-down and implementation is affecting communities in a highly negative way, they said. At the same time, MPAs may not be the best conserving approach for marine biodiversity or fisheries resources under all circumstances, as is being presently proposed, they observed. Antonio Carlos Diegues provided information about marine extractive reserves (RESEX) in Brazil, as an alternative approach to participatory conservation. This approach, particularly effective for sedentary species, reaffirms the rights of artisanal fishing communities to the sea. This is also a model in which the relationship between traditional knowledge and resources are taken into consideration for resource conservation, he said. Sebastian Mathew, speaking on the current initiatives to develop an ecosystem approach to fisheries, said that the concept could potentially be useful to draw greater attention to destructive gear, such as bottom trawling, as well as to address the impact on fisheries resources of pollution from land-based and other sources.

During the session on "Trade in Fish and Products". Fish Sebastian Mathew focused on the implications of processes under way in the World Trade Organization (WTO) for small-scale fisheries. He drew attention, in particular, to negotiations on eliminating tariff and non-tariff barriers, and on clarifying and improving WTO disciplines on fisheries subsidies. Further, there is a possibility, he said. that. by disciplining production-distorting subsidies in fisheries, WTO's mandate could broaden to include fishing methods (and not only fish products), with several and fish implications, including the likelihood of linking with multilateral environmental agreements.

Speaking on fish trade and food security, John Kurien observed that the relationship between fish trade and food security is complex and not necessarily positive. He noted that the goal should be to enhance the positive contribution of fish trade to both direct and indirect food security, and to make it more inclusive, and that only truly responsible fisheries initiatives can achieve this goal.

Alain le Sann of Peche et Developpement, France, shared the reactions, in France, to Darwin's Nightmare, a film on the political and social impact of the Nile perch fishery in Lake Victoria. The film, he said, was effective in drawing attention to the ethics involved in the trade of Nile perch from Lake Victoria, and has generated debate on the course of action that needs to be pursued, such as consumer boycotts. He emphasized the need for a nuanced response that supported the organizational actions of fishworkers and their communities in Africa, and emphasized responsible consumption.

Ernesto Godelmann and René Schärer spoke of the problems and prospects of ecolabels for small-scale fisheries, and the role that ecolabels can play in promoting selective fishing and thereby, sustainable management of fisheries resources. It is necessary to create stronger alliances with consumers in the countries of market destination, in the context of consumer boycotts, public awareness campaigns, and ecolabelling and fair trade, they said. Measures to promote resource sustainability and ecosystem integrity as well as equity and food security are as essential, they added.

MSC certification

The discussion that followed emphasized the need to explore the implications of the Marine Stewardship Council (MSC) certification of fisheries that are primarily harvested by industrial vessels, for

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small-scale fisheries, as, for example, on the small-scale fisheries for hake in Chile. It was also pointed out that a certification of industrial fisheries as sustainable was in itself problematic from a small-scale-fisheries perspective. This was specially so as the certification process did not take into account gear-related social and labour issues.

nother issue discussed was the relationship between population growth, particularly in developing countries, and the demand for fish, and overfishing. Increase in population does not directly translate into a greater demand for fish and higher pressure on resources, as demand is linked to purchasing power, argued John Kurien.

In the panel discussion on "Disaster Coastal Fishing Preparedness and Communities", panelists shared their priorities in relation to disaster preparedness, based on their experiences with natural disasters affecting fishing communities, such as cyclones, the El Niño, and the 26 December 2004 Indian Ocean tsunami. Panelists included Prasertcharoensuk of the Ravadee Sustainable Development Foundation (SDF), Thailand; Herman Kumara of National Fisheries Solidarity (NAFSO), Sri Lanka: Harekrishna Debnath of National Fishworkers' Forum (NFF), India; Juan Carlos Sueiro of Cooperaccion, Peru;

Gunnar Album of Coastal Campaign, Norway; and Cornelie Quist of VinVis, Netherlands. All the presentations highlighted the importance of strong community organizations in a disaster context. The need for good co-ordination, handled by a set of people with experience in disaster management, was also highlighted, as was the need to integrate disaster preparedness into local development plans, prepared in participatory ways. The Thai presentation highlighted efforts to integrate disaster preparedness into school curricula. It was suggested that it is important for organizations such as the FAO to have in place a team of people experienced in disaster co-ordination, deployable at short notice. In the session on "Labour Issues in Fisheries", Sebastian Mathew provided information on the ongoing International Labour Organization (ILO) process related the proposed Convention to on Comprehensive Standard on Work in the Fishing Sector, which could not be adopted at the 93rd session of the International Labour Conference (ILC) in 2005 for lack of quorum.

Convention relevant

He drew attention to the importance of ensuring that the Convention is adopted when it comes up again for voting in 2007, as its adoption could benefit the small-scale sector in several ways. The Convention is also relevant in a context where employer-employee relations in the small-scale sector, as well as employment of wage labour, are on the rise. The Convention does not at present cover shore-based women workers, and it is important to work toward their inclusion, he said.

avid Eli of Technical Services for Community Development (TESCOD), Ghana, presented a film being made on child labour in the fisheries of Lake Volta in Ghana. While it is a traditional practice in Ghana for children to be handed over to relatives or friends to develop their skills, factors such as changes in the local economy and a rise in HIV/AIDS have given a new face to child labour in Africa, in general, and Ghana, in particular. The working conditions now are close to slavery. Though Ghana has elaborate laws and programmes to eradicate the worst forms of child labour, the lack of enforcement is the biggest hurdle. An important issue raised in David Eli's presentation was the distinction between paid labour and family labour with similar conditions. He spoke about the need for a nuanced understanding of child labour. If children are denied their right to education and fulfilment of their aspirations, this can be considered as child labour, even if children live at home and work to contribute to the household economy.

There were four presentations in the session on "Aquaculture". The first presentation by Rolf Willmann drew attention to the rapid growth in aquaculture in the recent past. Cultured fish accounts for almost 50 per cent of food fish supply today. Even as production increases, there is growing trend towards intensification of aquaculture practices, and an increasing influence of markets, trade and consumers on production, he said. The presentations from Chile by Juan Carlos Cardenas and from Brazil, by Soraya Vanini of Instituto Terramar and a member of Red Manglar, drew attention to the social and environmental costs of export-oriented salmon and shrimp farming, respectively. Particular attention was drawn to the expansion of the fishmeal industry to support the increase in production of high-value carnivorous species, and the links of reduction fisheries with environmental degradation. The need to prevent the

underlined. The presentation from Thailand highlighted the emerging problem of privatization of inshore areas (commons) for mariculture, through the Seafood Bank project being promoted by the Thai government. This could lead to growing conflicts in coastal areas, said Ravadee Prasertcharoensuk. In the final session on "Fishworker

introduction of genetically modified

organisms for aquaculture was also

Organizations: Emerging Concerns" there were ten presentations from fishworker organizations, NGOs and others working to support the small-scale sector. The session was meant to highlight issues that would need to be addressed in the coming period, to defend the interests of fishworkers and their communities. The concerns identified related to fisheries management, access to land and sea resources, labour and social security, trade, aquaculture and related issues, such as recognizing and supporting women's roles in fisheries and in organizations. The presentation bv Cornelie Quist provided an incisive account of the achievements and challenges fisherwomen's facing movements in Europe.

Although its agenda was packed, the witnessed some workshop verv interesting and thought-provoking discussions on a wide range of issues of concern to men, women and children of fishing communities. It also witnessed excellent participation from fishworker organizations, NGOs, academics and others. Especially noteworthy was the great participation of local groups and communities from Ceará. The women's meeting, on the sidelines of the workshop, provided good insights into how women of fishing communities in Brazil and Chile are organizing around their concerns.

This report has been filed by Neena Koshy and Chandrika Sharma (icsf@icsf.net) of ICSF. The full report of the workshop and the presentations can be accessed from the conference webpage on the ICSF website (http://www.icsf.net/jsp/conference /GB2006/) Child labour

Growing pains

Child labour in the artisanal fisheries of Senegal was the focus of an ILO study on the worst forms of child labour (See also pg 47)

T enegal's marine artisanal fishing sector was chosen by the International Labour Office of the International Labour Organization (ILO) for an in-depth study on the "worst forms of child labour". The study, titled Etude sur les pires formes de travail des enfants dans le secteur de la pêche artisanale maritime sénégalaise (Study on the Worst Forms of Child Labour in the Senegalese Maritime Artisanal Fishery), was carried out in December 2002 by the Senegalese Institute for Agricultural Research, with the field research conducted by Le Centre de Recherches Océanographiques de Dakar-Thiaroye (CRODT), the Centre for Oceanographic Research at Dakar-Thiaroye. It was contracted by the International Labour Office (ILO/BIT) in the framework of the National Programme for the Elimination of Child Labour (IPEC/Senegal).

The study's findings highlight that in Senegal's artisanal fishery, over a quarter (26.6 per cent) of the crew embarked are children under the age of 15. In the sector as a whole, child labour represents just under one-third of the workforce (28.8 per cent), 36.5 per cent in boatbuilding and repair workshops, 35.8 per cent in outboard motor workshops, 35 per cent in fish processing and 41 per cent in trade-related activities.

The reasons for the presence of such large numbers of children in the workforce are essentially socio-economic, the study concludes. Child labour, and the conditions under which children work, are culturally accepted and socially entrenched. Generally, child labour is seen in a positive light, particularly in the fishing communities, where it is considered an important part of preparing children for adulthood, and for taking up future responsibilities—a professional training that is undertaken in the real-life conditions of the sector, where, traditionally, sons follow their fathers, and professional competence is passed down from father to son.

In Senegal, the fisheries sector plays a vital role both in the economy and in society at large, providing, as it does, important foreign exchange earnings, employment and food. There are an estimated 100,000 direct jobs provided in fishing in Senegal, 90 per cent of these being in the artisanal sector. It is further estimated that nationwide up to 600,000 people (17 per cent of the working population) earn their living from fisheries-related activities.

As for food, fish is highly important in the local diet. With an annual per capita fish consumption of 26 kg, fish represents some 75 per cent of the animal protein intake. This is very high when compared to per capita fish consumption generally in sub-Saharan Africa (6-9 kg annually), where fish makes up only 20 per cent of the animal protein intake. In 1999, Senegalese fish exports reportedly earned the country some US\$314 mn, equivalent to twice its debt repayments for that year.

The artisanal fishing sector dominates the Senegalese fishery, accounting for 80 per cent of the fish landings (some 375,000 tonnes in 2002, down from 390,000 in 2000), and employing around 60,000 seagoing fishermen. It is noteworthy that in recent years there has been a huge increase both in the size of the fishing fleet and in the fishing population.

Increased numbers

In the area between Djifere in the south and Saint Louis in the north, which accounts for over 90 per cent of the national artisanal fishing fleet, the numbers of pirogues reportedly increased Maritime Regions and Main Artisanal Fish Landing Centres

Senega

from 4,968 in 1982 to 9,761 in 2003. Much of the increase is due to investment in vessels and gear by people leaving the agricultural sector, which has experienced severe crises in recent years.

The workforce too has been swollen by in-migration from the agricultural sector. Landings from the sector have more than doubled over the last 20 years, from around 150,000 tonnes in 1981 to 366,000 tonnes in 2002, prompting considerable concern about sustainability of both fishing livelihoods and the resources on which they depend.

But the sector has proved highly dynamic and adaptable. Motorization has become widespread, with over 90 per cent of the pirogue fleet motorized, and there has been a considerable diversification of fishing operations. Today, large pirogues of up to 20 m are found, and more than 20 different kinds of fishing operations are recognized, including many modern adaptations. The latter include multi-day boats with ice-boxes, squid jigs and long lines. In many areas, there has been a move away from traditional activities that target small pelagics for local markets towards demersal species for export (including squids and octopus). Fishing

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migrations to grounds in the waters of neighbouring countries (notably Mauritania) have become more widespread.

The child labour study covered most of Senegal's 700-km coast, including four of the five main maritime areas (Grande Cote, Cap Vert, Petite Cote, and Sine Saloum), with Casamance excluded for reasons of security. Nine main landing centres were selected according to three criteria: the size of the pirogue fleet and number of fishermen, the importance of activities associated with fishing, and the degree of isolation (determining, as it does, access to social services, education and health). Sampling was undertaken according to the nature of the activity, and representative of the size of the target population. In the case of the fishing units, a random stratified sample of 10 per cent was taken.

Fleet census

According to the CRODT March 2002 Pirogue Fleet Census, 63 per cent of the total pirogue fleet in the study area is concentrated in the nine centres selected for study, three of which account for 45 per cent of the fleet (Saint Louis, Mbour and Kayar). On the basis of their census,

Defining the Worst Forms of Child Labour in Senegal

Child: Person aged between six and 14 years old, that is, less than 15 years old. This is in line with the International Minimum Age Convention (No 138), and the Senegalese Merchant Marine Code, which formally forbids the embarkation of sailors under 15 years of age.

Worst forms of child labour: All kinds of work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.

The Worst Forms of Child Labour Convention (C182), 1999 applies the term 'child' to all persons under the age of 18, and includes the following as the 'worst forms of child labour':

CRODT calculated that overall the centres selected for the study are highly representative (63 per cent, ranging from 46 per cent to 84 per cent) of the kinds of fishing operations carried out in Senegal.

or the purposes of the study, fishing operations were divided into six main categories: multi-gear fishing vessels (combining two or more fishing methods); surround-seines; liners: gillnetters; vessels with ice-boxes; and other kinds of vessels (drift nets, encircling gillnets, beach-seines and cast nets). Apart from looking at child labour in seagoing fishing activities, the study looked four associated at activities-carpentry (boatbuilding and repair); outboard motor maintenance and repair; fish processing; and trade.

Two questionnaires were used. One was targeted at the pirogue captains and the managers of the workshops, and the other at the child workers in the fisheries sector. The first aimed to identify the main activities carried out, and the associated professional risks; the second, to document information on the children—their socio-demographic profile, tasks, occupations and working conditions, levels of remuneration and destination of pay.

Interviews were also carried out, including individual interviews, with the heads of households of the child workers, as well as with the public and private authorities intervening in the fisheries

- all forms of slavery or practices similar to slavery, such as the sale and trafficking of children, debt bondage and serfdom, and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict;
- the use, procuring or offering of a child for prostitution, for the production of pornography or for pornographic performances; and
- the use, procuring or offering of a child for illicit activities, in particular, for the production and trafficking of drugs as defined in the relevant international treaties.

sector. In parallel, focus-group discussions with child workers and senior actors in the sector were organized.

In addition, general observations were made by the researchers on the children and on their working environment. These related to the physical hardship of their work, the risks of accident, the degree of surveillance and support provided by adults, the nature of the working environment, and the existence of adequate protection measures. Further, precise information was collected on the state of health centres available for receiving sick or injured child workers.

A number of problems were encountered. These included the influence that older people wielded over the children, where children may have been intimidated into giving biased answers. There were also difficulties in estimating earnings of seagoing children in some units, particularly where there are large fluctuations in earnings (such as amongst migrant fishers), and where income is only calculated and shared out at the end of the season, or on the eve of important religious festivals.

No exact number

In many cases, determining the exact age of the children was impossible, as many do not know their ages. In some centres with strong migrations, it was not possible to find out the exact number of fishing units for some kinds of fishing, and not all pirogues take on child labour. Overall, 827 children working in 467 units were interviewed, 673 (81.4 per cent) working directly in fishing. Most of the respondents work in the four main landing centres of Saint Louis (191), Joal (131), Mbour (103) and Kayar (73).

hildren under 15 represent 28.8 per cent of the artisanal fishery labour force. In fishing itself, child labour represents just over 25 per cent. In Djifere, child labour is relatively low, since it is a place mainly dedicated to migrant fisheries, where harsh working conditions and the need for physical strength mitigate against the employment of child labour.

The highest levels of child labour are found aboard the liners and gillnetters. Here they constitute one-third of the crew. These techniques are the least demanding of physical strength, and fishing is carried out during the day, with operations lasting less than 24 hours. This compares with surround-seine operations, where fishing is often at night, and vessels with ice-boxes make trips that can last several days. In these operations, child labour comprises, respectively, 15 per cent and 17.9 per cent of the crew.

Above-average numbers of children were found to be working in two suburban centres of Dakar—Grand Mbao and Hann. Here the number of children in each unit (seagoing pirogue or workshop) was 5 and 3.4, as against an overall average of 1.8.

There is a wide range in the actual number of children employed across the different kinds of fishing activities. In pirogue fishing with surround-seines, while the proportion of children compared to the overall crew may be relatively small, the actual numbers are relatively high. It is in these units that the highest average numbers are to be found (3.2), and their presence is deemed essential for bailing. Generally, there was a very high rate of work attendance by child workers (95.8 per cent), with only the surround-seines of Hann showing high absentee levels (above 50 per cent).

In the main, 86 per cent of child workers work the year round. More than 70 per cent of the pirogue fleet record a strong round-the-year presence of children. This is much less marked in fishery-related activities, where children often take up shore-based work during school holidays.

As regards the age and sex of the children, most of those interviewed were boys (girls made up only 8.2 per cent). Forty-eight per cent of the boys and 39 per cent of the girls fall within the age group of 14-15 years. No girls were recorded in fishing activities, being mainly active in processing work. Most of the boys work in fishing (83.1 per cent), and report an average age of 13. The average age of children entering the fishing profession is 10.6.

A high proportion of child workers are orphans—16.2 per cent have lost at least one of their parents. They tend to be under the care and direction of a tutor or uncle (or aunt) to learn about the profession. Children living with both parents generally work as part of a family group, with their father, mother or uncle or aunt.

The main reason given by children for taking up fishing is to get out of school, but it is worth noting that a high number enter due to their precarious family situation. In most cases, children have willingly left school to work in the fisheries sector, but a significant number (33 per cent) have been expelled. It is explained that this is due to the ease with which money can be earned in fishing, and the promise of a career. Some parents explained that children even try to get expelled from school so as to go fishing. In only one of centre, in the Dakar suburb Soumbédioune, was the high cost of school fees mentioned, a factor that is linked to the relatively higher living standards in the capital.

Many heads of households claim that child labour forms an important part of their children's education and professional training. In their view, children who master a profession early on, easily find work. Given the prospect of unemployment, this is an important factor that favours fishing over schooling.

Culturally acceptable

However, the public authorities see things differently. While child labour may be culturally acceptable (passed on from father to son), it is socially harmful. In effect, the large number of child workers mainly results from the abrogation of their parents' responsibilities.

T is a selfish way to exploit children, given that children still need education and the opportunity to grow up. They also consider that enrolling children into fishing encourages truancy, and while it may accustom children very early on to earning money, it does not assure them any future career.

On average, children in the artisanal fisheries sector work just over eight hours per day. In purse-seiners and multi-day ice-carrying vessels, working hours are much longer, 9.9 and 9.4 hours, respectively. By contrast, in gillnetters, hours are much shorter, averaging 6.8 hours daily. These differences are due to differences in the nature of the operations: purse-seiners may operate both day and night, while large multi-day boats, with their powerful engines and ice-boxes, go far offshore for many days. In the case of gillnetters, the catch has to be brought to market rapidly, by the end of the morning or early afternoon, and as there are no onboard storage facilities, spoilage is a big problem.

However, the work of the children does not end there. In addition to sea time, for those children who work in family units, as apprentices or as co-owners, they also have to assist with landing the catch, and cleaning and arranging the pirogue. But other children, who work independently, may leave immediately after the catch is landed.

The study report also discusses a number of other important issues. These include the extent to which children are subject to physical violence, the nature and remuneration of their work, and the risks and dangers to which they are exposed.

A large number of those children fishing report that they are beaten (51.2 per cent), physically abused (57.4 per cent) or harassed (35.2 per cent). This is much higher than in shore-based fishing-related activities. As regards working at night, rest periods and time off, in both fishing and fish processing, much of the work (50.5 per cent and 62.2 per cent, respectively) is carried on at night. While there is generally no time off given at the weekends or provisions made for paid holidays, religious holidays are respected, particularly in Muslim communities.

Arduous task

The main task for children working at sea is to bail out the pirogues, a task that is essentially reserved for them. Keeping the boat empty of water is important for its stability, and in rough seas, and in shallow and leaky vessels, bailing can be an arduous task. But this is not their only task, and alongside adults, they also fish. Their skills are particularly appreciated aboard line-fishing pirogues, where 17 per cent of the children fishing are aged less than 11.

n gillnetting operations, children also help haul the nets and clear them of fish. In purse-seining operations, children are required to dive into the water to guide the fish into the net, and this is generally done by those aged between 12 and 13, who have some swimming experience. There is a high risk of drowning due to the long time spent in the water, far away from the adults who are busy dealing with the net. In multi-day ice-carrying vessels, children bait the hooks, fish with handlines, and haul the longlines. They also help to prepare meals and arrange the fish in the ice-boxes. The particularly harsh working conditions aboard these vessels are reflected in most of the children engaged being above 12 years of age.

In those pirogues that engage in a variety of fishing operations, the number of tasks required for children to master is even higher. These vessels generally carry both lines and gillnets, and as in the multi-day boats, the number of tasks requires older children. In these vessels, there are no children under nine years of age.

In addition to their fishing tasks, children also work in preparing the vessels for going to sea. In the case of surround-seine and multi-day boats, the children are required to anchor and un-moor the vessels, after unloading the catch. After anchoring, they must swim ashore, over several dozen metres. For multi-day boats returning after a trip, children are often left aboard alone to guard the catch, equipment and crew belongings.

Generally, the daily tasks assigned to children vary according to the nature of the operations undertaken. Also, the diversity of tasks and the harshness of conditions is a function of the age of the children embarked. The tasks aboard the multi-day boats, surround-seine vessels and multi-gear pirogues are the hardest and most dangerous.

In drawing conclusions and making recommendations, the authors of the child

labour study focus on the need to combat the entrenched views of child labour as culturally acceptable and socially desirable, and the important role and responsibility of the State in doing this. They provide nine alternative proposals for addressing the problem:

Senega

- 1. Provide short-term professional training tailored to the sector and geared towards a decent job.
- 2. Establish centres of excellence that offer ideal conditions for training young people who want to take up a career in the fishing sector.
- 3. Modernize the artisanal fishing sector by promoting alternative technologies that can take over many of the tasks habitually carried out by children.
- 4. Categorically forbid the embarkation of children under 13 years of age on to multi-day pirogues and surround-seine vessels.
- 5. Make it compulsory to use adequate navigational and safety equipment.
- 6. Organize anti-tetanus vaccination programmes.
- 7. Promote the development of social, educational and recreational programmes.
- 8. Develop national-level programmes to keep children at school.
- Provide financial support for the parents of child fishers (scholarships, subsidies, short- and medium-term loans, etc.).

This report has been compiled by Brian O'Riordan (briano@ tiscali.be), ICSF Brussels Office Secretary Tsunamis

Myth of green belts

In the wake of the 2004 Indian Ocean tsunami has come some dangerous myth making about green belts and buffer zones as protective barriers

ne of the most pervasive myths following the 26 December 2004 Indian Ocean tsunami is that healthy ecosystems, such as coastal forests and coral reefs, reduced the damage to coastal communities.

Partly on the basis of this myth, governments throughout the region are enthusiastically embracing the planting of mangrove forests as a natural defence against future tsunamis. Vast sums of money are at stake; for example, IUCN-The World Conservation Union is promoting "Mangroves for the Future", a Euro38-mn (US\$48.5-mn) programme that aims to build natural barriers of mangroves in 12 countries in Asia and Africa. If saving lives in future tsunamis is the real purpose of these schemes, then every euro may be wasted.

In this article, I briefly review the evidence for the effectiveness of green belts, and conclude that there is, in fact, no good empirical, theoretical or analytical support for the hypothesis that coastal forests provide meaningful protection from tsunamis.

The concept of buffer zones is equally flawed: to be effective, they would need to be many kilometres wide, much wider than those currently proposed, and almost impossible to institute without prohibitively high social and economic costs.

Governments in the region should enact legislation and provide financial assistance to allow people to return to their land and resume their livelihoods. Future loss of life can best be prevented by an effective early-warning system, community education and disaster planning. Future loss of property is unavoidable and preferable to the large social and economic costs of current reconstruction policies.

The idea that healthy coastal ecosystems can provide meaningful protection against tsunamis is a beautiful idea that deserves to be true, but beauty isn't always truth. The horror of the tsunami and a long history of disappointment in the conservation movement as coastal forest degradation accelerated over the last few decades combined to create a strong psychological desire for good news. Even Bill Clinton was seduced by the myth. The suspension of critical faculties is perhaps acceptable among conservationists. role whose as environment advocates is perhaps appropriate, but a lack of rigour among professional scientists is unacceptable.

The crux of the issue for me as an ecologist is that bad science is being used to justify worse policy, with the potential for major social injustice. Hopefully, it is not too late to reverse this injustice before my profession becomes complicit in one of the great land grabs in post-colonial history. Furthermore, the prominence of the mangrove myth must divert resources from potentially more effective measures, and, consequently, those who promote the myth may contribute to unnecessary loss of life in a future tsunami.

Media attention

Released amid large fanfare within weeks of the Indian Ocean tsunami, the United Nations Environment Programme (UNEP) Rapid Assessment Report set the agenda for a plethora of similar reports and international media articles, most of which simply repeated the contents and anecdotes of the UNEP and earlier reports. The uncritical repetition of these studies has only helped to perpetuate the myth by obscuring its provenance. The UNEP report, *After the Tsunami*, is largely a series of eyewitness reports, with some quantitative estimates of damage that are often inaccurate, at least in Aceh, Indonesia, a region I first visited in 1984 and whose reefs I have been studying since 2000.

For example, the report quotes the central planning agency of Indonesia for estimates of 30 per cent damage to 97,250 ha of reefs in Aceh. Subsequent surveys of the region by myself and my colleagues revealed that the damage to reefs, while occasionally spectacular, was trivial, particularly when compared to pre-existing damage from destructive fishing. More pertinent to the argument here are the conclusions of the report on the mitigating effect of mangroves, based on selective observations from an earlier Wetlands International report. For example, the UNEP report states, "Anecdotal evidence and satellite photography before and after the tsunami event seem to corroborate claims that coral reefs, mangrove forests and other coastal vegetation, provided protection from the impacts of the tsunami". Contrast this with the following statements from the original 2005 Wetlands International report: "...the evidence so far [i.e. after the tsunami] seen from satellite images is that in high-energy situations such as Aceh province, Sumatra, complete loss of mangroves occurred, indicating that in extreme events, very little mitigation may be possible..." and "..in the coastal area of Banda Aceh ... mangroves were carried ...by the waves...two to three kilometres inland; this included mangroves that were in relatively good condition in the area of Ulee Lhee".

The fanfare with which this report was greeted is in stark contrast to the reception given to later UNEP and IUCN-commissioned reports, which were much more ambivalent about the mitigation myth, or, indeed, presented empirical data that contradicted the conclusions of the initial report.

Within four to six months of the event, a small number of articles emerged in the scientific literature that seemed to confirm the mangrove myth, and these, plus the UNEP report, continue to be cited in support of it. Papers and reports that criticize or question these studies are routinely ignored. Below, I outline serious problems with these studies.

Property losses

The first study from Tamil Nadu in India reported that human deaths and property losses were lower in coastal hamlets fronted by coastal forests (Kathiresan, K. and N. Rajendran. 2005. "Coastal Mangrove Forests Mitigated Tsunami". *Estuarine, Coastal and Shelf Science* 65:601-606). However, when my colleagues and I re-analyzed the data, we discovered that the relationship between coastal forest and tsunami damage was false. In fact, the most important characteristics of villages where damage was lower were height above sea level and the distance of the village from the coast.

nce these two factors were taken into account, the effect of the forest fronting the village was negligible. A second study from the same area, led by scientists from Denmark, used satellite data to conclude that coastal vegetation had reduced damage from the tsunami (Danielsen, F., M. K. Sorensen, M. F. Olwig, V. Selvam, F. Parish, N. D.Burgess, Т. Hiraishi, V. M. Karunagaran, M. S. Rasmussen, L. B. Hansen, A. Quarto and N. Suryadiputra. 2005. "The Asian Tsunami: A Protective Role for Coastal Vegetation". Science 310:643). However, this study was flawed because these authors did not use statistically independent observations in their analysis. For example, the authors pointed out that three northern villages incurred minimal damage because they were situated behind dense vegetation.

However, no area elsewhere incurred damage this far inland, even when vegetation was absent. The final study from Sri Lanka also concluded that mangroves offered protection; however, once again, despite claiming to use a semi-quantitative approach, the study did not compare the observed pattern of damage against patterns expected by chance: the basis of a robust statistical approach (Dahdouh-Guebas, F., L. P. Jayatissa, D. Di Nitto, J. O. Bosire, D. Lo Seen and N. Koedam. 2005. "How Effective Were Mangroves as a Defence against the Recent Tsunami?" Current Biology 15:R443-R447.) In fact, when my colleagues and I analyzed the data, we found no association between tsunami damage and either forest degradation or pre-tsunami forest condition. In other words, the pattern of damage was no different from that expected by chance, and, therefore, cannot be linked to pre-tsunami forest condition. My colleagues and I have written to the editors on each occasion, and, at every journal, our comments have been rejected. Journal editors and peer reviewers must, at some point, take responsibility for what is published. It will be a permanent stain on our profession if this issue is not treated with the rigour it deserves.

Mitigation hypothesis

In a trip to Aceh in March 2005, my colleagues and I were able to collect our own data to test the mitigation hypothesis. We used a combination of variables collected from the reefs and coast of Aceh, Indonesia, including per cent cover of coastal vegetation, to test whether these variables influenced inundation distance. The majority of the variation in inundation distance was explained by the slope of the coastal terrain. Inundation was independent of reef quality or cover of coastal vegetation prior to the tsunami.

In other words, the tsunami stopped only when it reached the relevant inland contour: where the wave was 10 m high at the coast, it reached the 10 m contour, whether this was 200 m from the coast, or 2 km.

Our results are strongly supported by a later UNEP/IUCN report (Chatenoux, B. and P. Peduzzi. 2006. Analysis of the Role of Bathymetry and Other Environmental Parameters in the Impacts from the 2004 Indian Ocean Tsunami UNEP/DEWA/GRID-Europe, Switzerland: http://www.grid.unep.ch/product/pub lication/download/environment_impac ts_tsunami.pdf), which found that inundation distance was best explained distance from the earthquake bv epicentre, that is, wave height at the coast, and, furthermore, that coastal vegetation had no significant effect on inundation distance.

In addition to these empirical studies, one analytical model, combined with experimental simulations, has suggested that dense forests may absorb up to 90 per cent of the energy of a tsunami wave (Hiraishi, T., and K. Harada. 2003. "Greenbelt Tsunami Prevention in the South-Pacific Region". *Report of the Port and Airport Research Institute* 42).

Without strong mathematical training, it is difficult to dissect this analytical approach. However, a model is only as good as the next empirical test, and none of the data from the Indian Ocean tsunami come remotely close to supporting this optimistic prediction.

While mangroves are very effective at dissipating the energy of storm waves, tsunamis are a very different beast, and, a failure to appreciate this is one of many reasons the myth has gained such status. In wind waves, most energy is contained near the ocean surface, and wave-induced water motion decays rapidly with depth.

In contrast, in a tsunami, water is in motion throughout the entire water column. The other major difference is that tsunamis have a wavelength of

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kilometres, compared to that of a few metres for wind waves. The wavelength of the tsunami when it hit the Acehnese coast has been estimated at 12 km. In places, the ocean kept rolling in for nearly an hour.

Incredibly, theoretical attempts to predict inundation distance from tsunamis are almost non-existent. The only attempt I know of that incorporates features of the terrestrial environment, such as the type of vegetation, is an equation developed for the insurance industry to predict potential damage to coastal settlements from asteroid-impact-generated tsunamis (Bretschneider, C. L., and P. G. Wybro. 1977. "Tsunami Inundation Prediction". Pgs 1006-1024 in C. L. Bretschneider, (Ed.) Proceedings of the 15th Coastal Engineering Conference. American Society of Civil Engineers, New York). This equation estimates the inundation distance as a function of tsunami wave height at the coast and the roughness coefficient of local terrestrial terrain. However, the predictions of the equation have yet to be tested empirically. This work has further been criticized because there is no explanation as to how the equation was derived and nor it does not take account of wave period.

In my correspondence with the authors of these studies, many other arguments have been presented to justify the mangrove myth. Some authors appeal to common sense or the laws of thermodynamics. This appeal is logically flawed and hardly scientific. Mangroves will absorb some of the energy in a thermo-nuclear explosion, but will they save lives because of this? This comparison may sound extreme; however, it has been estimated that the energy released by the earthquake was equivalent to 23,000 Hiroshima bombs, nearly four for every kilometre of coastline hit by the tsunami. Others have appealed to the precautionary principle. This is, in effect, an admission of error.

Strange distortion

One scientist has argued that because there may be a risk to life in future tsunamis if mangroves are not rehabilitated, the normal standards of statistical proof should not apply to his research. This is a very strange distortion of the precautionary principle. Which advice is more likely to put people at risk?

Viewpoint

Viewpoint

Suggesting people are safe behind mangrove barriers, or suggesting they run for the hills?

thers have taken a very Machiavellian view, and while they concede that their analyses are less than perfect, they believe this unimportant as long as mangroves are rehabilitated: a classic case of the end justifying the means. This constitutes a failure to appreciate the potential of their science to affect the lives of the people involved, for example, those evicted or prevented from returning to the buffer zones.

The upshot of this brief review of the scientific literature is that there is no credible theoretical, analytical or empirical evidence to support the idea that coastal vegetation can mitigate the effect of tsunamis on coastal communities. Indeed, the only rigorous statistical analyses of empirical data to date refute the mangrove myth.

In Aceh, the initial reconstruction plan released by Indonesia's central planning agency recommended establishing a 2-km buffer zone along the length of the west coast of Aceh, a policy that would have involved relocating over 500,000 people, nearly 50 per cent of the surviving population. While this initial plan has sensibly been abandoned, the current Master Plan still includes green belts and buffer zones. As of March 2006, no green belts or buffer zones have been established; however, the reconstruction is only beginning, and there is no guarantee they will not appear at a later date.

Will these buffer zones be effective? A simple examination of how far inland the Indian Ocean tsunami penetrated in the various regions suggests this is highly unlikely. The inundation distance in each location was largely determined by the size of the tsunami at the coast and the topography of the coastal zone. In Aceh, the region closest to the epicentre of the pre-tsunami earthquake, the wave height was between 5-12 m. Inundation distances were regularly over 2 km in low-lying areas on the west coast, and up to 6 km near the regional capital, Banda Aceh, generally reaching between the 10 m and 20 m contour.

Inundation distances

Clearly, even a 2-km buffer zone would not have prevented major damage. In Sri Lanka, the wave height was estimated at between 2-8 m, with inundation distances of up to 2 km on the west coast, which, being in the lee of the main tsunami waves, were smaller than on the east coast, for which I can find no data. The proposed buffer zones of between 100-200 m are clearly inadequate. In India, where the maximum wave height was less than 5 m, the tsunami, nonetheless, penetrated up to 2.5 km. Consequently, a buffer zone here of 500 m will not prevent major damage in a future tsunami of similar, or larger, size.

Historically, inundation distances have been much larger: for example, the tsunami following the eruption of Krakatoa penetrated 8 km inland through primary rainforest. A tsunami dated to within 1,000 years before the present on the west coast of Australia reached 30 km inland. Clearly, if saving either life or property is the goal, these buffer zones are totally inadequate.

However, I do not mean to suggest they should be made larger. The concept is impractical, unjust and unworkable. The social, economic and emotional costs of relocating large numbers of people from their traditional homes and livelihoods must also be considered, and, while often difficult to quantify, will almost certainly outweigh the economic cost of rebuilding following rare catastrophic events. Furthermore, the enforcement of these buffer zones without the consent of the displaced people violates numerous international conventions. Another myth of prominence is that the tsunami travelled very fast over land, when, in fact, in Aceh, many people outran the wave, despite getting almost no warning. An effective early-warning system and adequate planning would have saved tens of thousands, if not hundreds of thousands, of lives.

I am concerned that promoting green belts and buffer zones as protective barriers, particularly in preference to tsunami early-warning systems, may lead to substantial loss of life in a future event. The available evidence suggests these barriers will be ineffective and, therefore, may encourage a false sense of security. Furthermore, these schemes must direct time and money away from more effective but technologically, logistically and politically challenging measures such as well co-ordinated early-warning systems, community education and emergency planning. Incredibly, over 18 months after the Indian Ocean tsunami, the Indonesian government has yet to deploy an early-warning system south of Sumatra, which the subsequent tsunami of 17 July 2006 has now made clear was a tragic oversight. Furthermore, the tremors from the tsunami were felt in the area affected, and the tsunami was preceded by a wave draw-down, a sure sign that the tsunami was imminent, yet people did not know to run. Government officials were given timely warnings of the likelihood of the tsunami from the Pacific Early Warning Centre in Hawaii, yet they failed to act. Clearly, education efforts in Indonesia have been inadequate.

Coastal vegetation, such as mangroves, can provide coastal communities with many valuable goods and services, and the protection of these ecosystems is, in general, an endeavour I wholeheartedly support; however, if the aim is to protect coastal communities from future tsunamis, the money would much better be spent elsewhere. Furthermore, the proposed buffer zones will not work, and it is time to let those displaced people return to their homes, if they wish, and support them to do so.

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Viewpoint

Fisheries management

Fishing rights vs human rights?

An ongoing class action litigation in South Africa brings to focus the challenge to the rights-based management system in the country's fisheries

group of South African artisanal fishers has launched class action litigation against the Minister responsible for fishing rights allocation on the grounds that the policies pursued by the South African government are inequitable and discriminatory, and violate the human rights of artisanal fishers in the country. Is it possible that the introduction of a rights-based management system might violate the human rights of certain fishers?

South Africa began introducing a rights-based fisheries management system as early as the 1960s, when quotas were introduced by the Department of Sea Fisheries for a limited number of commercially exploited species. From 1988 onwards, the Department allocated rights in terms of the Sea Fisheries Act 12 of 1988. These quotas were allocated within a racially defined fisheries structure and were largely held by white rights holders, while the artisanal fishery was being marginalized. Highly capitalized commercial companies predominated in the industry during this period.

Following the election of the first democratic government in 1994, the government began a process of restructuring the fishing industry and developing new legislation and policies to guide the allocation of fishing rights and the management of these rights. Towards this end, the Marine Living Resources Act (MLRA) was introduced in 1998.

This Act empowered the Minister of Environmental Affairs and Tourism to allocate fishing rights in three defined fishing categories: subsistence, commercial and recreational. No provisions for artisanal fishers were included in this Act and the legislation states clearly:

"no person shall undertake commercial fishing or subsistence fishing, engage in mariculture or operate a fish processing establishment unless a right to undertake or engage in such an activity or to operate such an establishment has been granted to such a person by the Minister" (MLRA, 1998,18 (1)).

In terms of the MLRA, a fishing right is granted to a specific person or entity and, "in terms of Section 21 of the MLRA, the right may not be transferred without the approval of the Minister or his delegate. Upon the death, sequestration, or liquidation of the right holder, the right vests, respectively, in the executor, trustee or liquidator and the right may continue to be exploited for the period of time permitted by the applicable legal provisions. However, any transfer of the fishing right to a third party requires approval" (General Fishing Policy, 2005).

Following the introduction of this Act, the government established a Subsistence Fisheries Task Group (SFTG) to investigate the nature and extent of subsistence fishing and to advise on the management of this sector. This task group undertook research along the coast in South Africa and identified approximately 30,000 subsistence fishers. Most significantly, the SFTG recognized that three categories of fishing practices could be discerned amongst these fishers, based on the empirical survey data that was gathered for this purpose.

Three categories

According to a 2005 affidavit by Ken Salo presented in support of the court case of Kenneth George and others vs the Minister of Environmental Affairs and Tourism, these three categories "were classified as subsistence, artisanal and commercial according to a comprehensive combination of social, economic, technical, spatial, ecological and historical criteria that did not weigh any one criterion more than the other".

'n South Africa, the artisanal fishery has specific characteristics. Artisanal fishers historically live in communities near the shoreline, use low-technology fishing gear, and harvest a variety of marine species found near the shoreline. Over generations, they have developed an understanding of the main biological lifecycle and migration patterns of certain marine species. Their catch is either consumed, shared, bartered or marketed through a complex set of relations and traditions developed between men and women, families, neighbours and local retailers. In this manner, fishing communities have developed a culture and caring for one another's livelihood.

There was considerable debate regarding the definition of artisanal fishers, and, although it was acknowledged by the Task Group that their needs should be accommodated, no formal recognition of this group legally ensued. Business and the large-scale commercial companies actively lobbied the authorities to maintain the status quo regarding the

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allocation of quotas and not to re-allocate to the artisanal or small-scale sector to any extent. They argued that government could best achieve its transformation and redistribution goals by supporting established industry to provide employment and to increase its black empowerment component. They were also successful in wooing organized labour in these companies to support them by promising them job security and, in some instances, a share in the profits through worker share schemes.

Following the introduction of the new legislative framework, the government department responsible for allocating and managing fishing rights, Marine and Coastal Management, developed a medium-term fishing rights allocation policy with a view to allocating rights for the period 2002 -2005. It was intended that a long-term rights allocation policy would be implemented following this initial period. The medium-term rights period did not recognize artisanal fishers as a category of fishers on their own and instead forced them to apply for 'commercial' or 'limited commercial' rights.

Limited rights

Only a small number of artisanal fishers were successful in obtaining these limited commercial rights and those who did get rights were allocated totally unsustainable quotas. Many bona fide fishers were left out of the system completely and hence no longer had access to the sea. Others were able to eke out an existence by working for rights holders in one or other sector at certain times of the season but often had no income during other times of the year.

uring 2005, Marine and Coastal Management released the Draft Long-term Fishing Rights Policy, which would effectively allocate long-term rights for up to 15 years in 19 of the commercial species. Artisanal fishers up and down the coast held high hopes that this policy would recognize and accommodate them; however, this new policy further entrenched their exclusion. The application process was extremely costly and complicated, and the application forms were only provided in English, which is not the home language of the fishers. The fishers were forced to either form companies or other legal entities with others and compete with the large commercial companies for the high-value species or apply as individuals for meagre quantum in a few limited nearshore species. The majority of the artisanal fishers have been completely excluded from obtaining long-term fishing rights. For example, in the nearshore West Coast Rock Lobster sector, of the 4,070 fishers who applied, only 813 have been allocated rights. Those who have been allocated rights have only received between 250 and 750 kg per annum. Once their catching and marketing costs have been deducted, these fishers will barely be living above the poverty line and those allocated only 250 kg will be way below the poverty line. Those who did get long-term rights have to operate in the narrow confines laid down in the policy. They are not skilled operators within this system and thereby remain totally vulnerable to exploitation.

The past 18 months have seen unprecedented action by the artisanal sector in South Africa as the fishers fight for their rights to their traditional livelihoods and those of the coastal communities in which they live, which depend on the artisanal fishing economies. They have embarked on a range of advocacy and lobbying activities, including numerous letters and memorandums to the Ministry and Presidency, meetings with officials, marches on Parliament, the chaining of leaders to the gates of Parliament, a hunger strike and vigil by veteran artisanal fisher activist Andrew Johnston, and building strong alliances with other stakeholders in civil society.

Currently, the fishers' hopes are pinned on the outcome of litigation, which they have launched with the support of Masifundise Development Trust, members of the Artisanal Fishers Association of South Africa and the Legal Resources Centre. The Legal Resources Centre, an NGO, is funding this class action against the Minister, and has launched papers on behalf of the artisanal fishers in this regard. The court cases have been launched in both the High Court and the Equality Court. The Equality Court is a new court introduced in South Africa, following the introduction of the first democratic Constitution in the country in 1996. The Equality Court aims specifically to give effect to the Equality Clause in the Constitution, which states that "everyone is equal before the law and has the right to equal protection and benefit of the law" (Section 1).

In order to provide the legal framework for this protection, the Promotion of Equality and Prevention of Unfair Act of 2000 Discrimination was promulgated. This Act states: "Neither the State nor any person may unfairly discriminate against any person" (Section The argument presented by legal counsel for the artisanal fishers centres on the belief that the Minister's failure to define and provide for the artisanal fishers in the Marine Living Resources Act of 1998, and the consequences of this failure on the lives and livelihoods of this fishing community, constitute a violation of a number of human rights contained in the South African Constitution. Matters of 'non-equality' nature in this case will be argued in the ordinary High Court.

Right to choose

The artisanal sector argues that the Minister has deprived them of their right to choose their trade or occupation. Section 22 of the South African Constitution provides that "every citizen has the right to choose their trade or occupation freely" (Constitution of South Africa, 1996, Section 22). According to a 2004 affidavit filed by Naseegh Jaffer on behalf of Masifundise in the matter between Kenneth George and others vs the Minister of Environmental Affairs and Tourism: "These fishers are faced with the untenable options of either forsaking their traditions and the skills passed between generations of fishers, and entering a commercial fishing industry for which they are not skilled, or resigning themselves to a life of poverty outside the framework of legal fishing operations, risking prosecution and criminal sanction. It is thus believed that these options do not constitute a proper 'choice' of trade or occupation as contemplated by the Constitution and are, accordingly, unlawful and unconstitutional".

It is also argued that the current legislative framework violates a number of other basic socioeconomic rights, most notably, the right of access to sufficient food, and hence the internationally recognized right to food security is threatened. The impact of this violation is felt by not only the fishers but by all members of their households and the extended community that depend on these livelihoods within the local marine and coastal economy. The to healthcare, housing right and education, and the rights of the child to basic nutrition are threatened by this violation, and hence are also cited in the arguments to be presented to the Courts. The right to have the environment

protected through reasonable legislative and other measures is central to the case as the Minister has a duty to develop legislation that fulfills this right whilst promoting the sustainable use of the country's natural resources. In addition to the abovementioned socioeconomic rights, the fishers argue that the way in which the policy and application process has been administered violated several key constitutional provisions, namely, the right of everyone to use the language of their choice. Enshrined in this is the duty imposed on the State to "use at least two official languages and to ensure that all official languages are treated equitably". The failure of the Department to provide application forms in the home languages of the fishers greatly exacerbated the difficulties experienced by the artisanal sector in understanding what was required of them when applying for rights. This aspect is directly linked to the right to reasonable administrative action, which is also a right protected by the Constitution.

Inequitable

This case argues that all of the above-alleged violations of the rights of artisanal fishers arise because the State, through the Minister, has failed to treat the fishers equitably in comparison to the other fishing sectors. In failing to do so, the law is inequitable and discriminatory and hence violates the central tenet of the Constitution, that of the Equality Clause.

South Africa

The Minister of Environmental Affairs and Tourism has, to date, fought the legal proceedings by appealing against the decision to hear the matter in the Equality Court. The fishers were heartened by the judgment of the Appeal Court that insisted that the fishers had the right to have the matter heard in this Court and noted that the Minister should not deny the fisher's prayer to have their say in court. The advantage of the matter being heard in the Equality Court as well as the High Court is that the Equality Court is empowered to order a variety of forms of redress, if it is deemed necessary. This raises the hope that it may yet be possible to envisage a real, rights-based fisheries management policy in South Africa, one based on the principles of social justice and the rights enshrined in the country's Constitution, and upon which the future of South Africa's new democracy rests.

> This article is by Naseegh Jaffer (naseegh@masifundise.org.za), Director of Masifundise Development Trust, South Africa, and Jackie Sunde (jackie@ masifundise.org.za), a Researcher for Masifundise, and Member of ICSF

No one-size-fits-all approach

This response to an article in the last issue of *SAMUDRA Report* discusses rights-based schemes in fisheries

refer to Derek Johnson's article, "Who is Sharing the Fish?", in SAMUDRA Report No 43 (March 2006), discussing the Sharing the Fish 2006 Conference that was held in Australia last February and to which the Food and Agriculture Organization of the United Nations (FAO) gave technical support. While the tone of the article is positive regarding the conference, and its outcome in supporting better-managed fisheries, I would like to emphasize a few points:

The FAO Secretariat has moved, beyond a doubt, on the matter of whether fishing rights are good or not. They are absolutely necessary and fundamental to the sustainability of the world's fisheries resources.

However, fisheries policies, management approaches—and fishing rights—need to be tailored to the specific context of countries and localities with respect to the fisheries in question, the social setting, culture, etc. Indeed, fishing rights have been allocated under long-standing programmes, such as the community development quota (CDQ) systems that been operating in fishing have communities in the Bering Sea; the various types of territorial use rights in fisheries systems (TURFs) such as those found in Japan, the Philippines, Samoa and Fiji; the Management and Exploitation Areas for Benthic Resources of Chile; and the beach management units (BMUs) found in Uganda, Tanzania and Kenya. It is for communities to decide on how efficient they would like their fisheries to be, with few or many boats of small or large size.

Fishing rights do not simply equate to the big individual transferable quota (ITQ) systems that have been designed for large-scale fleets. Moreover, fishing rights should not be limited to large-scale

SAMUDRA Report No. 44 July 2006

fisheries. The current variety of schemes for formally allocating fishing rights has vastly expanded the range of fisheries and fishing situations to which rights-based schemes can be applied. They should apply to large and small fisheries, both with large and small boats. They are, by far, the best tool to re-establish and formalize traditional fishing rights and, thus, protect the rights of fishermen. Even ITQs need not threaten the livelihoods of small-scale fisheries, and they should not foster inequity if well designed.

There is no one-size-fits-all approach, and more attention needs to be given to appropriately sequence policies and policy reforms. Perhaps it is time to convene an international conference on the allocation of rights in small-scale fisheries, to which I am sure ICSF would be able to contribute.

This Letter to the Editor is from Ichiro Nomura, Assistant Director General, Fisheries Department, Food and Agriculture Organization of the United Nations (FAO)

Planning for a community

This review looks at the documentation of a community-based coastal resource management project in Danao Bay, Philippines

Rehabilitating Nearshore Fisheries: Theory And Practice On Community-based Coastal Resource Management Danao From Bay, Plilippines by Arjan Heinen. CBCRM Resource Centre, UP Social Action Research and Development Foundation, Inc., UP College of Social Work and Community Development, Oxfam GB-Philippines Office, Netherlands Development Organization (SNV Philippines), and Pipuli Foundation.

uch is being written and fisheries spoken about management today. There are several areas where fisheries management is being carried out either by coastal communities themselves or with the assistance of governments or other agencies. The approaches differ, depending on the fishery and the community of fishers involved. The Philippines, in particular, probably because of its specific island geography, fairly long history has а of community-based coastal resource management (CBCRM). Some of these approaches have been documented elsewhere, but one of the most illustrated of them is the one documented by Arjan Heinen in the publication under review. As its title elaborates, it is about the theory and practice on CBCRM in Danao Bay, Philippines, facilitated by the Pipuli Foundation.

This book not only makes very interesting reading as it alternates between the theory and processes involved with the actual strategies employed by the Danao Bay community, but it also clearly explains how the actual action was undertaken—a brilliant teaching manual. Very complex activities ranging from listing biodiversity and stock assessment, to calculating productivity of the bay have been undertaken by the people and lucidly retold in the book. By getting involved in these activities themselves, the community understands the intricate relationship between the standing stock, the biomass and sustainable harvestable production. It is this understanding that leads them to affirm the need to restore the stock and make the difficult decision to manage it.

From this rather technical process, they move to the even more difficult task of understanding the psychology of the different players in the Bay. The stakeholders' perspectives are analyzed by assessing the disparities in their knowledge, lifestyle and values. By defining the shared and differing norms and values in the community and the local government, the people of Danao Bay could plan for change, and tackle resistance to it. Working out a clear vision was the next step, followed by defining the management unit, and working for a plan through a management body. The book explains how the core group of keen learners put their traditional and newly acquired knowledge together and, with the good of the whole community and future generations in mind, worked out the resource management plan for the Bay.

Different styles

Different management styles-the unrestrained exercise of power, charismatic leadership, consensus building among the resource users—are also discussed and illustrated. Heinen explains how as a shadow fisheries management body in Danao Bay, the fisher-managers learned to deal and negotiate with the town mayors who



Today's Agenda

Inaugural Session

- Panel Discussions:
 - Responsible
 Fisheries
 - Distant-water Fisheries
- Group Discussions

Marginally ...

SAMUDRA for Fortaleza is a newsletter that will report on the proceedings of this workshop. It will also serve as a forum for the sharing of ideas and experiences, in the form of brief write-ups, interviews and opinion pieces. Please contact the SAMUDRA Team or anyone at the ICSF Secretariat if you have something to contribute. Needless to add, the opinions and viewpoints expressed here do not necessarily represent the official views of ICSF.

Founded in 1954, Colonia Ecologica Sesc Iparana (SESC)—the workshop venue—is just 20 minutes from the Iracema beach, 17 km from the centre of Fortaleza and 27 km from the airport. It offers various options for leisure and hospitality, including sports, ecological trips, parties and social events.

Bem-Vindos !

Welcome to Fortaleza, the capital of the State of Ceará, home to a vibrant artisanal fishery, and the venue for the 20th anniversary meeting of ICSF

It is now 20 years since the International Collective in Support of Fishworkers (ICSF) was founded in Trivandrum, India, in 1986. Since then, several changes have taken place in fisheries, especially in the small-scale and aquaculture sectors, as well as in the larger political, economic and social framework in which they operate.

This workshop is being held to understand these changes, and to take stock of important developments in fisheries. Participants include ICSF Members and representatives of fishworker organizations, as well as other individuals/organizations that have been working with small-scale fisheries in their respective countries The following are some of the major issues that will be discussed in the next three days:

- Responsible fisheries
- Biodiversity
- Labour
- Trade
- Gender
- Disaster preparedness and coastal fishing communities
- Aquaculture
- Fishworkers' organizations

Fortaleza was chosen as the venue for the workshop for a couple of important reasons.

The State of Ceará is home to a very important, well-organized artisanal fishery with a long history of struggle against destructive fishing practices and inequitable policies.

Also, the strategic importance of fisheries for the social and economic development of Brazil has been recognized by President Luiz Inácio da Silva through the establishment of a special Secretariat for Aquaculture and Fisheries.

This workshop is expected to be a forum to share perspectives, discuss and analyze recent developments in small-scale fisheries and fishing communities, explore possible future scenarios, and highlight the actions needed to ensure a secure future for small-scale fishing communities.

respective countries.	
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REFLECTIONS | John Kurien

From Rome to Fortaleza...

he plan for the Rome Conference came out of the blue. A let-L ter. A challenge. With key facilitators around the globe-three women and one man-the job of coordination was so much easier and enjoyable. The event itself was a combination of discussions-very serious and top-rate-and great fun. The involvement of the Commune of Rome and permission to use the Piazza Novona for a cultural event added public legitimacy and popular participation to the event. Overlapping it with the World Conference on Fisheries organized by the Food and Agriculture Organization of the United Nations (FAO) brought about the widest possible press coverage.

Nostalgia apart, in the runup to Rome, there was more decentralized, democratic preparatory work, and, at Rome itself, a more delectable assortment of passionate conference agenda and celebratory side events than we seem to be able to put together these days.

We thought it was over with Rome. But the commitment made to the fishworkers to create a supporters' forum lingered. It took over two years to fructify. Discussions in India. Visits by some of us to Norway, Rome, Senegal and Canada, in between. Finally, the International Collective in Support of Fishworkers (ICSF) was born in Trivandrum, India, in November 1986.

We had a dream: Make this support network a "force to reckon with" in the world of fisheries. Bangkok in 1990 confirmed that we should move on. Cebu in 1994 set a new agenda. The creation of the two world forums of the "fishworkers" and the "fisher people" made us question the need for our continuance when we met again in Trivandrum in 1998. But in 2002, at Maputo, we reaffirmed a new vision for support.

Since then, global recognition has come from several quarters: Most importantly, the FAO awarded the Margarita Lizárraga Medal for 2002-2003 to ICSF in recognition of its "comprehensive, sustainable and catalytic initiatives in support of the Code of Conduct for Responsible Fisheries, through workshops, outreach and advocacy activities, as well as by mobilizing grassroots



support and enhancing human capacity-building, particularly in developing countries." And, more recently, in 2005, Svensk Fisk awarded the Kungsfenan Swedish Seafood Award (also referred to as the "Nobel Prize of the Seafood Industry") to ICSF in recognition of its "efforts to promote sustainable fishing, for working closely with small-scale fisheries and their communities, and for conveying news relating to fisheries and information about sustainable fishing to the general public living in coastal communities."

Thus, we have been able to silently influence major fisheries discussions at FAO, the United Nations (UN) and the International Labour Organization (ILO). Our success in influencing global policy in fisheries has perhaps been far beyond our expectations. However, the recognition from fishworkers and fishing communities themselves has been uneven and varied across the continents.

The strength of any network depends on its weakest link. For us, this has been the difficulty to enlist new members as supporters. Perhaps this mode of support is not relevant anymore. Perhaps the class approach to defining contradictions in the sector is not valid anymore. The need of the times

> is for support to coastal communities around the world to resolve complex, evolving and multi-dimensional issues by taking contemporaneous action at the global and the local levels. To achieve this, we have to ask ourselves: How appropriate is the structure we have today to cope with these challenges? Are the links we have made in the last two decades strong enough to further the cause? How effective is our working style in delivering our promises of support?

How good is our stock of knowledge for launching such a pursuit? How best can the goodwill we have earned over the years be used as a foundation to build upon for the future?

Today, these are some of the crucial issues that stare down at us. We need some soul-searching. The onus is on each one of us to articulate our thoughts and offer frank opinions. We came to Rome in 1984 in faith and with expectations and hopes.

At Trivandrum in 1986, we envisioned an approach to support. We reach Fortaleza today, two decades later, with questions and a choice of crossroads. Only time will tell which was the real watershed.

John Kurien, currently Professor at the Centre for Development Studies, Trivandrum, India, is a Founding Member of ICSF

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Blast from the Past

The International Conference of Fishworkers and their Supporters, which led to the creation of ICSF, made these recommendations in July 1984:

e, fishworkers and their supporters from 34 countries of the world who struggle for survival and sometimes die for their cause, urge governments to be responsive to the demands of the local fishworkers' organizations to:

- Reserve and protect for small-scale fishing all near-shore waters and fishing grounds accessible to it
- Ban all technologies that disturb the balance of the ecosystem either through overfishing or pollution, and prevent the use of chemicals that are forbidden in the industrialized countries
- Associate local fishermen's organizations or fishermen communities in devising and implementing regulatory measures (with concrete possibilities of control)
- Respect and guarantee the fundamental rights of fishworkers to free

association; withdraw all measures that penalize the workers

We recommend that governments of the Third World co-operate on a regional basis to ensure effective management of their fish resources in the long term.

We stress the essential role of women in fishing communities, considering their sensitivity to the deteriorating quality of life.

We support them in getting organized to:

- protect their activities in the production process
- improve their working conditions
- alleviate the burden of their work
- actively reduce pollution, and protect the environment

We call for a collective effort in changing attitudes and values towards women in order to get their full participation in decisionmaking at all levels.

We emphasize the positive contribution of non-governmental organizations in the development of technology and forms of participatory management that ensure the future of small-scale fisheries. Priority should be given to lessening dependency on foreign capital, equipment and knowhow.

We ask that all scientists who recognize the importance of conserving and enhancing the person-nature relationship take a strong stand on behalf of the small-scale fishermen.

We urge them to work in collaboration with local fishermen's organizations to complement their knowledge of the sea and to enable them to regain their rights over the sea.

F ortaleza (Portuguese for fortress) is the State capital of Ceará, located in northeastern Brazil. With a population of more than 2 million, it is considered the second most important city in the region in economic terms, after Salvador in Bahia. Fortaleza has an area of 336 square km. To the north of the city lies the Atlantic Ocean, to the south the cities of Pacatuba, Eusébio, Maracanaú and Itaitinga, to the east is the county of Aquiraz and the Atlantic Ocean and to west is the city of Caucaia.

History

Fortaleza's history began February 2, 1500 when the Spaniard Vicente Pinzón landed in Mucuripe's cove and named the new land Santa Maria de la Consolación, but because

About Fortaleza

of the Treaty of Tordesillas, the discovery was never officially sanctioned. The real colonization started when the Dutch constructed Fort Schoonenborch in 1649. Later, the Portuguese expelled the Dutch and renamed it Forte de Nossa Senhora da Assunção. Around the fort, which even today is perfectly preserved, a small village grew to become the fifth largest city in Brazil. In 2004 Luizianne Lins was surprisingly elected as mayor.

Tourism

A complete infrastructure, three thousand hours of sun per year and the constant ocean breeze give the full dimension of this paradise. For those who have more energy, the nightlife is full of attractions, with bars, restaurants, and shows. Not even on Mondays does Fortaleza cool down. The city is known for having the "wildest Monday nights in the world." The Praia de Iracema (Iracema's beach), one of the first urban nuclei of the city, holds many bars and restaurants. There, the Ponte dos Ingleses (Bridge of the English), the old docks, is located and used to watch the sunset, and spot dolphins.

Warm waters bathe Fortaleza's urbanized beaches, which offer every comfort to the tourist. The scenery is complemented by the jangadas (small and rustic rafts used by many of Ceará's fishermen). From the jangadas come the sea's fruits, responsible for the best Ceará's cuisine. The Praia do Futuro (Beach of the Future) is the meeting place for bathers, concentrating a large number of typical beachside restaurants, with carnauba straw used in its

(contd... Page 4)

(...from Page 3)

construction. The local population calls them "Barracas de Praia." Thursday nights, the beach becomes the biggest sensation in the capital's nightlife, with live music, forró and a lot of crab to eat.

A few kilometers away from the city are some well-known beaches as Prainha, Iguape and Porto das Dunas. In the latter, there are two large water parks.

Culture

Fortaleza has a strong and traditional cultural life. Since the end of the 19th Century, the city has had various cultural institutions. The Instituto do Ceará (Ceará Institute) was estabilished in 1887, and is the oldest institution. Its reseach has a historic, geographic and antropologic type.

The Acad-emia Cearense de L e t r a s (Cearense Word Academy) was the first institution of the sort in the country, being estab-

lished in August 15 of 1894.

In 1892 Fortaleza was the place for a cultural movement of literary expression called "Spiritual Bakery" and its

praised literary style was used during the Modern Art Week of 1922.

There are many other cultural centres like the Banco do Nordeste Cultural Centre and the most important, Dragão do Mar Centre of Art and Culture, which is placed on the quarter of Praia de Iracema, an important cultural centre of Fortaleza.

Landmarks

- José de Alencar playhouse
- Mucuripe lighthouse
- Cathedral
- Iracema Statue
- Nossa Senhora da Assunção Fort
- Palace of Light

Sports

There are several soccer clubs based in Fortaleza such as Fortaleza EC, Ferroviário AC and Ceará SC.

> With strong winds the Praia do Futuro is an excellent place for nautical sports. Fortaleza hosts world competitions of surfing,

> > 1

windsurfing and kite surfing.

— From Wikipedia

Know Your Portuguese

GREETINGS

Hello	Olá
Good day	Bom dia
Good evening	Boa tarde
Good night	Boa noite
Hi	Olá
Good bye	Adeus
See you soon	Até logo/Até a vista

GENERAL RESPONSES

Yes	Sim
No	Não
That depends	Depende
I don't know	Não sei
I don't think so	Acho que não
I suppose so	Suponho que sim
I think so	Creio que sim

It doesn't matter I don't mind Of course True With pleasure

Não me importo Claro Verdade Com prazer

Não importa

QUESTION WORDS

Where?Onde?When?Quê?Why?Quem?What?Qual?/Quais? (pl.)Who?Como?How?Quanto?How much/many?Quanto/Quantos?Is/are there?Há?

Helpline

Conference Secretariat Salao de Eventos 2 (adjacent to Conference hall)

Registration/Travel SESC Reception (Tel: 55 85 3318 6000)

Money Changing SADOC (Cambio e Tourismo, Fortaleza. Tel: 3219-7993)

Emergency Numbers Police 190 Ambulance 3433-7373

SESC Address

Colônia Ecológica Sesc Iparana Praia de Iparana S/N Caucaia Ceará Cep: 61.605-600 Tel: 55 85 3318 6000 Embratur: 20.03.612.122/0004-70 Site: www.sesc-ce.com.br

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This (Rome) conference was not conceived as an intellectual experience. It became a living human experience in which spontaneity, life-sharing and self-expression at all levels played a major role.

> — from the 1984 Rome Conference Report

Tomorrow

FAO Technical Guidelines

- > Biodiversity & Ecosystem Approach
- ➢ Fish Trade
- Disaster Preparedness
- Video Documentary Show

Samudra for Fortaleza is a special publication brought out by the SAMUDRA Team for ICSF's 20th Anniversary Meet at Fortaleza, Ceará, Brazil



Today's Agenda

- FAO Technical Guidelines
- Biodiversity and Ecosystem Approach
- ➢ Fish Trade
- Panel: Disaster Preparedness
- VideoDocumentaries

Marginally ...

A total of 57 participants are here at Fortaleza to deliberate, over three days, issues dealing with fisheries and fishworkers. Most of the participants (41) are from the South, while eight are from the North. In terms of geographic spread, Latin America is best represented, with 27 participants, while Asia and Africa have seven each.

The country-wise breakup is as follows:

Argentina 2; Brazil 18; Chile 5; France 3; Ghana 1; Guinea Conakry 1; India 4; Mauritania 1; Netherlands 3; Norway 1; Peru 2; Italy 1; Senegal 2; South Africa 2; Sri Lanka 1; Thailand 2; (Secretariat 8).

Looking at ICSF at 20

As ICSF enters the adolescence stage, seven of the Founding Members got together to reminisce about the past—and ponder the future

The workshop kicked off with Rene Scharer of Instituto Terrmar, the co-host, and Chandrika Sharma, Executive Secretary of ICSF, warmly welcoming the participants to Fortaleza, and hoping that the next three days would see much meaningful discussion on the various issues that have brought them together.

In an overview of ICSF, Chandrika Sharma outlined the work done by the organization since its formation in Trivandrum, India, in 1986 by a group of concerned individuals from 18 countries, in response to an invitation from the Centre for Development Studies (CDS) and the South Indian Federation of Fishermen Societies (SIFFS). Since then, ICSF has been working on issues that affect the artisanal and small-scale fisheries sector, especially in the developing world. It has taken part in and itself organized several significant conferences on these issues.

ICSF has engaged with several UN processes on issues ranging from labour (for instance, highlighting the need to include small-scale fishers under the proposed ILO Convention and Recommendation on Working Conditions in the Fisheries Sector); recognition of the rights of small-scale fishworkers and communities in fisheries and biodiversity management within a larger oceans/ biodiversity perspective (UNCED, FAO, CBD): the rights

of small-scale fishworkers to highly migratory fish stocks (UN Fish Stocks Agreement) and the fishing subsidies debate (UN Environment Programme).

ICSF is a founder member of the Coalition for Fair Fisheries Arrangements (CFFA), which campaigns for fair and equitable fisheries arrangement between the EU and the African, Caribbean and the Pacific (ACP) countries.

ICSF, Chandrika said, has also worked steadfastly to foster a gender perspective within fishworker organizations. The organization has been especially successful in disseminating infor-

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(UNCED, IAO, CDD), the rights
THE ARMS OF THE FOUNDING MEMBERS ARE STILLING ENDIGH
FOR THEM TO READ THEIR NOTES.

REFLECTIONS | Alain Le Sann

Sound Bites

Unique, indispensable counterbalance

lthough I became a Member of ICSF only at the end of the 1980s, I had had the opportunity to attend the Rome Conference organized by those who went on to found ICSF. That Rome meeting was determining for me, because I discovered there the burgeonning power of the organizations in the South. The NGOs that I had met up till then were dominated by representatives from the North. The Rome Conferenceand, subsequently, ICSF-helped me to understand the shortcomings of industrial fishing and the impact of European policy on Southern countries. Fishworkers from the South made us understand that the future lay in artisanal fisheries.

Coming back from Rome, I decided to publish a newsletter, Pêche & Développement, and it has been published regularly ever since. Today, in Lorient, France, where I am based, artisanal fisheries is about the only one to survive, industrial fishing having collapsed at the end of the 1980s. After exhausting the fish stocks in Europe, the old industrial trawlers were sold off to Africa, where they went on to create great damage.

ICSF also greatly helped us to understand the importance of the role of women in fisheries. The Cebu meeting in 1984 particularly stressed this aspect. The deep crisis that affected fisheries in France in 1992-93 showed how fishermen's wives play a major role in sustaining fishing livelihoods; today, they hold important positions in various organizations in fishing communities.

While giving priority to fishworkers from the South, ICSF has been wise enough to maintain links with fishworkers from the North. The evolution of fisheries in the North makes it possible to understand how artisanal fishing in the South may evolve, and what are the shortcomings to avoid so as to guarantee a sustainable future. One of the big challenges for artisanal fishermen in the South is to develop deep-sea fishing, making sure that they avoid using equipment that is too costly. Markets are often in the North and they have a growing impact on fishing communities in the South. Thanks to ICSF's network and documentation, we were able to take an effective part in the debate in France around the film Darwin's Nightmare, on the export of the Nile perch from Africa. Northern countries import more and more fish from the South, and many people question the sustainability and the equity of such trading practices.

ICSF is a unique network that enables people to understand interactions and evolutions in the world's fisheries. It is an indispensable NGO that can strengthen the voice of fishing communities, particularly to counterbalance the growing influence of environmental NGOs, who tend to impose their own points of views. Artisanal fishermen in Northern countries become invisible minorities. In order to survive, they must not only build up alliances with other groups, but also develop links with fishermen from the South, who are much more numerous, to voice their claims on a global scale, once they get organized.

We have reached the limits of the exploitation of the world's fish resources and we must now share them equally. The challenge for the world's fishermen is not only to defend their fishing activities, but also to restore the productive capacity of the coastal zones in which they operate. We have a lot of such positives experiences from around the world—and they nurture our hopes.

On the workshop:

This workshop should focus on topics like

- access to reserved fishing zones;
- co-management of fishing resources
- access to markets with specific rights
- certification of artisanal fishery
- empowerment of fishworker organizations and coastal communities

On fisheries in Ceara:

The State of Ceara has no official policy on artisanal fisheries at all. The last initiative was the creation of a fishing committee in 1995. But since 1999, nothing has been done.

We fishers in Ceara face many problems. The State government has no political will to tackle the problems, and the federal agency, IBAMA, is inefficient too. Through subsidies, the government encouraged the industrial fishery, and too many boats were built. Today nearly 350 steel boats lie rusted and disused, and illegal fishing for lobster is rampant.

The solutions are well known: participation of coastal communities in comanagement, monitoring of fishing resources, genuine control by competent public departments, partnership with international organizations...

On the Instituto Terramar:

The institute was created in 1993 to defend the artisanal fishery in Ceara. Its main aims are to assist fishworker communities and give them technical aid, support coastal social movements, defend fishers' rights against land speculation, protect mangroves and oppose the setting up of shrimp farms.

— These are excerpts from an interview of Rene Scharer by Alain Le Moal, CCFD, France

Alain Le Sann (ad.lesann@wanadoo.fr), Publisher and Editor of Pêche & Développement, is a Member of ICSF

(ICSF at 20... contd. from Page 1)

mation and analysis through its varied output, ranging from publications like *SAMUDRA Report*, Monographs and Dossiers, the Yemaya women-in-fisheries newsletter and other studies, and the ICSF website, SAMUDRA News Alerts and multimedia products.

After that overview, seven of the Founding Members reflected on 20 years of ICSF. John Kurien recalled that the original founders of ICSF did not go to Rome (and, subsequently, to Trivandrum) as individuals but with the strong backing of people involved in fisheries. The support of this large number of people worked towards creating a network that is a force to reckon with in the world of fisheries development.

Cornelie Quist recalled that her 22 years of involvement with the ICSF process has been a unique experience of mission and vision, and friendship shared between members. ICSF has played an important role in the valorization of artisanal fisheries at the local and international levels. This became very evident in ICSF's involvement in the post-tsunami work.

ICSF has not only championed the cause of artisanal fishworkers, Cornelie added, but also of women fishworkers and vendors. ICSF's effort to integrate a gender perspective into the dominant discourse was most challenging and unique, so much so that today women's role in artisanal fisheries has been more or less acknowledged.

The greatest contribution of ICSF, Cornelie summed up, relates to the conceptual and contextual analysis of fisheries development. She hoped that in the coming triennium ICSF would take up the challenge of a more integrated approach to fisheries policymaking.

Hector Luis Morales characterized ICSF as a network of not only support but also tolerance. It is important for ICSF to recognize and address the environmental and social changes that have taken place over the past 20 years. The future lies in allowing communities to be stakeholders in the struggle, he said. Nalini Nayak chose to highlight what she labeled as "some of the confusions" that have evolved over the last 20 years. When ICSF was started, the founders and supporters seemed to be rather sure what the small-scale sector in the Southern part of the world was and quite sure of whom to support. Massive changes have since taken place and, Nalini added, "I am rather confused who the small-scale sector includes and what it represents. This is one of the challenges for us to redefine with our fishworker friends – who we are going to support and for what in the coming years?"

Although ICSF has given importance to the question of women in fisheries, Nalini pointed out, the issue has not gained much ground, mainly because ICSF's principal constituency has been fishworker organizations, which are mainly male-dominated. Where the local community is given power in decision-making processes, there women definitely play a role. Nalini hoped that in the coming decade, ICSF would be able to articulate and realize the concept of sustainability where women, men and nature do actually matter.

Rolf Willmann, Senior Fisheries Officer, FAO, said that ICSF has become mainstream for FAO and is filling a void to counterbalance the presence of the environmental groups by representing the fisheries sector, in general, and fishworkers, in particular. Though ICSF is now mainstream, Rolf said, the crucial issue is translating good policies into ground realities so that we can see real changes in the lives of fishing communities.

James Smith recalled that one of the things that impressed him most at the Rome conference was how the organizers were able to allow the voices of fishworkers from the villages to reach the international level. As for the future, James pointed to the need to think in terms of workers' and human rights, and the place that fishworkers should find in the maritime world. There should be fewer and fewer distinctions between the workers in the maritime field, he said.

A minute's silence was observed in memory of Michael Belliveau, a Founding Member of ICSF, who passed away in 2002. Just before the reminiscence session ended, Nalini reminded the audience that there were actually not just the seven at the founding meeting of ICSF, but a total of around 24 people who came together. Some of them have since moved out due to a lesser involvement with the sector as a whole, while some others remain very active, although at the periphery. In conclusion, Rene quipped, "If ICSF didn't exist, we would have had to invent it."

Lovers on Aran

The timeless waves, bright, sifting, broken glass, Came dazzling around, into the rocks, Came glinting, sifting from the Americas

To posess Aran. Or did Aran rush to throw wide arms of rock around a tide That yielded with an ebb, with a soft

That yielded with an ebb, with a soft crash?

Did sea define the land or land the sea? Each drew new meaning from the waves' collision. Sea broke on land to full identity.

- Seamus Heaney

<On the Web>

The ICSF website, http://www.icsf.net, has several resources on fisheries, fishworkers and fishing communities, including all issues of *SAMUDRA Report*, ICSF's triannual journal, and *Yemaya*, the newsletter on women in fisheries. All these, as well as the other publications, are available for free download from the site. You can also subscribe to SAMUDRA News Alerts, the free news service designed to deliver fisheries-related news and analysis daily or weekly, in either plain-text or HTML format.

For this workshop, a special website has been created at http:// www.icsf.net/jsp/conference/gb2006. The site features all the presentations made at the workshop as well as useful information and links related to the themes discussed. The final report of the workshop will also be uploaded to the site.



Darwin's Nightmare

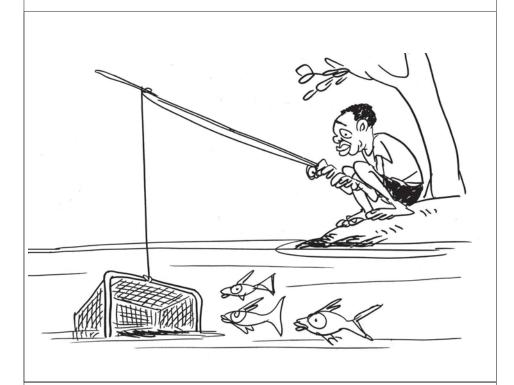
ome time in the 1960s, in the heart of Africa, a new animal was introduced into Lake Victoria as a little scientific experiment. The Nile Perch, a voracious predator, extinguished almost the entire stock of the native fish species. However, the new fish multiplied so fast that its white fillets are today exported all around the world.

Huge hulking ex-Soviet cargo planes come daily to collect the latest catch in exchange for their southbound cargo...Kalashnikovs and ammunition for the uncounted wars in the dark centre of the continent.

This booming multinational industry of fish and weapons has created an ungodly globalized alliance on the shores of the world's biggest tropical lake: an army of local fishermen, World Bank agents, homeless children, African ministers, EU commissioners, Tanzanian prostitutes and Russian pilots.

"Witty, provocative, angry and heartbreaking, this incisive, imaginative film ranges wide in the subjects it covers." — TIME OUT, London

(Darwin's Nightmare was screened here last night. Those who missed the film can request *for a private screening.)*



Know Your Portuguese

Parabéns!

Feliz Natal!

Feliz Páscoa!

Bom apetite!

Boa viagem!

Boa sorte!

Feliz aniversário!

SPECIAL OCCASIONS

Congratulations! Happy Birthday! Happy Christmas! Happy New Year! Feliz Ano Novo! Happy Easter! Good Luck! Enjoy the meal! Have a safe journey!

Take Care!

Cuidado!

ETIQUETTE

Please Thank you Excuse me I'm sorry, but... That's a shame May I...?

Se faz favor / Por favor Obrigada *Com licença / Desculpe* Peço desculpa, mas... Que pena Posso...?

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... it takes the waters of many rivers to make a mighty ocean—a samudra. And so it is with our Collective...

- Viewpoint from SAMUDRA Report No. 1

Tomorrow

Labour Issues in Fisheries

- \geq Aquaculture
- \geq Fishworker **Organizations: Emerging Concerns**
- \geq **Concluding Session**
- **Dinner Party/Festa**

Samudra for Fortaleza is a special publication brought out by the SAMUDRA Team for ICSF's 20th Anniversary Meet at Fortaleza, Ceará, Brazil



Today's Agenda

- Labour Issues in Fisheries
- > Aquaculture
- Fishworker Organizations: Emerging Concerns
- Concluding Session
- Dinner Party/Festa

Obrigado!

As we meet for the last day of the workshop, it's time to thank all those who have spent several months in preparing for this event.

We would like to especially acknowledge the staff of Instituto Terramar, specifically, René Schärer, Eluziane, Thiago, Jefferson, Soraya, Rosinha, and Giselta Maria. And we're not forgetting Michelle...!

Thanks also to the staff of SESC for their hospitality, great food, and help, particularly, Sadi, Alain and Faustino. A special word of appreciation for the translation provided by ITI Translation, Fortaleza.

For the sketches, many, many thanks to Surendra (India) and our very own Gunnar. And to InApp, as always, great work!

And now, até logo, Boa viagem...!!

A long and fruitful day

The penultimate day of the workshop witnessed some spirited discussion on a range of issues affecting small-scale coastal fishing communities

The first day's spirited discussions on re sponsible and rightsbased fisheries, and what such an approach would mean for small-scale fishing communities, brought forth concrete examples from Chile and Peru of their experiences with management areas and artisanal fishing zones. These subjects were explored in depth and more specifically in the group discussions that followed. The pre-dinner panel discussion dealt with distant-water fisheries.

The level of enthusiasm set on the first day continued on Day 2, a fairly packed day that saw discussions ranging from the role of the FAO in alleviating the conditions of poverty in fishing communities to trade in fish and fish products and how coastal communities should prepare for natural disasters.

In an exhaustive presentation, Rolf Willman, Senior Fisheries Planning Officer, FAO, described the possible strategies and policies that could be employed to allow small-scale fisheries to help alleviate poverty and contribute to food security. Small-scale fisheries are undervalued and deserve more attention in policymaking, research and fisheries information systems. They should be provided with greater rights and access to fishery resources, land, water, technology, knowhow and capital, Rolf concluded.

The session on biodiversity and the ecosystem approach featured an elaboration of the CBD process, how marine extractive reserves can serve as an alternative approach to participatory conservation, and the small-scale fisheries perspective on the ecosystem approach to fisheries and oceans.

The post-lunch session on trade in fish and fish products focused on the World Trade Organization and the role of trade in food security. There was also an analysis of how the French public responded to the film *Darwin's Nightmare* and the role of globalization in the trade of the Nile Perch. How ecolabels affect the small-scale fisheries in Latin America was also discussed. The panel discussion on disaster preparedness and coastal fishing communities featureda range of experiences and potential strategies to mitigate the effects of natural disasters.

The post-dinner screening of films rounded off a long and fruitful day, and hopefully set the tone for today, the concluding day of the workshop.

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REFLECTIONS | Nalini Nayak

More ups than downs

am not generally a person who lives in the past, although I do look back at times to take stock of where I am going and why. When I was requested a reflection for SAMUDRA for Fortaleza on the occasion of the 20th anniversary of ICSF, lots of memories did come back, and one can say they range widefrom high moments to low, from very successful programmes to some mediocre ones, from very engaging and stimulating friendships to some broken ones, from serious and hard work to exciting, fun times, but always, very constructive discussion and debates that have contributed to 'valorizing the coastal fisheries'. On average, the ups seem to outweigh the downs.

At the close of the Rome Conference in 1984, the fishworkers present suggested that the supporters continue to support the coastal fishers in their struggle for survival, while they themselves would create and strengthen their collective organizations, demanding their rights to recognition and survival. While the fishworker organizations maintained their autonomy and grew the world over, the ICSF that was created in 1986 sought to:

- build bridges between fishworkers in regions where their fisheries were linked through bilateral agreements;
- see that the coastal fishery and fishworkers found a place in the international discourse and decisionmaking in world fisheries; and
- provide inputs to fishworker organizations on macro-developments that affect them at the micro-level.

I may not be wrong in concluding that ICSF has made significant strides in these directions, and, from that point of view, these two decades have been well worth it.

But this does not preclude the fact that these years have also been tumultuous. While change is inevitable, I do not think any of us foresaw the speed or manner in which the entire equations of international relations and the mindset of development would change. In a way, capitalism and neoliberalism triumphed, shattering our organizational struggles against that twin ideology, shattering the strength of the organized working class by atomizing and 'unorganizing' it. The socialist option was rendered outdated, although the 'rights perspective' gained ground in the new global village, where the most powerful still call the shots.

These changes have affected coastal communities, fishworkers, fishworker organizations and all of us in so many ways. While several have been pauperized and rendered redundant, the surviving segment has got overcapitalized and has joined the race to chase the last fish. So has our definition of the 'coastal fisher', the 'artisanal fisher', the 'small-scale fisher' changed? By the very fact that we have worked mainly with fishworker organizations, the base that we relate to has continued to be those fishers that have survived.

But here again, there have been several catches: these are generally male fishers, and this has been one of the main reasons that women have got a back seat and probably one of the reasons why the feminist perspective within ICSF has not evolved to the extent it should have. This does not discount the work done and achieved in this regard, because ICSF has played a significant role in spreading a feminist and gender perspective and awareness among women from fishing communities, which has been the basis for them to organize and thereby expand the horizon and canvas of the coastal fishery.

The other disturbing happening has been the divisiveness in the fishworker organizations themselves, at a time when the world economy is converging as never before. While ICSF spent long years building bridges and understanding between fishworker organizations of the North and the South, East and West, great mistrust and divisiveness developed when the organizations themselves took the lead in linking up globally. Moreover, the management of power within the organizations themselves has highlighted that alternative forms of organization have not sufficiently evolved to create workable options at the base. Here again, I would venture to add that patriarchal forms of leadership and vision have contributed to this shortcoming.

How we in ICSF have dealt with these changes, has been the challenge, keeping the rudder of the boat firm to weather the storm, while, at the same time, being responsive to the demands of those who keep their heads above the water. The brunt has been borne, in the most part, by the ICSF Secretariat, which was the institution created in 1991 when the Members realized that the demands made on them, and the need to respond to various issues locally, regionally and globally, were beyond the abilities of voluntary service.

But, in a way, the creation of the Secretariat—and an efficient one at that has resulted in the decline of voluntary participation of the ICSF Members.

Forging a strategy aimed at the future is, therefore, going to be a greater challenge. But given the fact that the ocean resources and the coastal zone continue to be focal points for development, and the fact that there still remains so much energy among the old and young to continue to struggle against overpowering destructive development, I feel certain that new and positive strategies can be crafted to forge ahead.

For me personally, the experiences as a Member of ICSF have led to widening visions, on the one hand, but to great humility regarding the role of a support network, on the other. For this, I am most grateful to all those who have made this possible.

Nalini Nayak (tvm_nalinin@sancharnet.in) is a Founding Member of ICSF

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Sound Bites

from South Africa

On the workshop:

We hope this could be an opportunity for representatives from fishworker and other organizations to come together and critically reflect on the gains that have been made for artisanal and small-scale fishers since the Rome Conference. This is also an opportunity to look at how the organizations can network collaboratively to address some of their concerns. It is also a chance to enhance the general understanding of fisheries, particularly in Latin America.

On fisheries in South Africa:

Southern Africa is fairly complex, and South Africa is fairly unique in southern Africa. South Africa has a highly industrial and capitalized commercial fishery, while most of the other countries are not as industrialized. The issues facing the region do certainly differ, even though all share some fish stocks.

The last 100 years saw the rapidly industrializing fishery dominated by four large white-owned companies. Those companies managed a strong stranglehold on the fisheries industry, and, during the apartheid regime, they were able to consolidate their position. In that period, many artisanal fishers lost their rights in the sense they were not allowed to fish on their own right.

With the transition to democracy in 1994, there were lots of hopes and expectations that the locals would be given rights, but that did not materialize at all. On the contrary, they were left out of the legislation and are not legally recognized at all as a sector.

Subsistence fishers are recognized, but this category involves those who fish to put food on the table — they are not supposed to sell the fish. Therefore, the key issue facing the sector is the lack of recognition and the resulting exclusion. It is ironic that this has happened in this last (postapartheid) period.

There are many issues facing fishers in South Africa, like enabling the fishworkers to speak for themselves, supporting them in organizing their own groups so that their voices are heard... The South African NGOs have often spoken for, and on behalf of, communities and it is really important that they advocate for their rights.

There are a number of other issues that have come up after the new policy. The small group of fishers that did get the right to fish, ironically, include some women because of the government's commitment to gender equity.

Women were encouraged to apply for rights and they have done so. In some communities, where the man is the traditional bona fide fisher, his partner is being offered the right, and he is now left out or excluded. The people are now going to court against the government because of the failure of the fisheries department to recognize artisanal fishers.

The biggest challenge is to be aware that the government does need to shift the racial profile of South African fisheries, which has, till now, been dominated by the whites. To that extent, they have to bring in new entrants, South African entrants. This is often at the cost of those talented artisanal fishers who have been there for many years. Therefore, the government must do a very fine balancing act.

On Masifundise Development Trust:

Masifundise is a South African NGO founded by a group of black activists, who started with adult education and adult literacy during the apartheid era, and who wanted to support and extend education to the blacks who were denied tertiary education.

In 1994, after the opening up of democracy, the organization went through an effort to re-strategize, and tried to focus on the poorest of the poor, which then led them to the coastal communities and the fisherpeople living on the coast. Now the focus is largely on coastal developmental issues, mainly integrated coastal area management.

Much of Masifundise's focus is on building capacities in the coastal communities. Another task is to document the impact of the quota systems on people's rights and on traditional forms of harvesting and organizing, since quotas have already started to split the community.

— These are excerpts from an interview with Jackie Sunde of Masifundise, by Neena Koshy

from Thailand

On the workshop:

This conference has widened my perspective on what is happening at the international level, which has been useful, since I have been mainly concerned with issues facing fishing communities at the local and national level in Thailand. This meeting is an ideal opportunity for all participants to articulate the key issues facing small-scale fishing, and for ICSF to advocate and lobby at the international level. This meeting has also been a good networking space to engage with other NGOs in different countries and continents.

On fisheries in Thailand:

There are 412 fishing communities in Thailand, and 60 per cent of the communities were affected by the December 2004 Indian Ocean tsunami. The organization I work for, Sustainable Development Foundation (SDF), in co-operation with a network of NGOS, has been working in the six provinces along the Andaman Sea.

In these provinces, 40 fishing communities were severely affected by the tsunami, and SDF has seen the post-tsunami rehabilitation process as a means to establish an alternative to the top-down approach. It has been advocating the rights of the communities in areas where the "middlemen", in collaboration with government officials, wanted to move

(...contd. Page 5)

REFLECTIONS | V. Vivekanandan

20 years of ICSF

986 was an eventful year for me. It started with the completion of the painful restructuring of the South Indian Federation of Fishermen Societies (SIFFS) as a three-tier co-operative. Soon after, I was struck by Bells Palsy and needed to take a month off for physiotherapy.

Then came my first trip abroad to attend a workshop at FAO in Rome. It was some kind of a consolation trip organized by Rolf as I had missed out on participating in the 1984 Rome Conference due to the unfortunate loss of my passport while it was in transit for my Italian visa.

The FAO visit led to an impromptu visit to the UK at the invitation of ITDG. Brian organized a most interesting exposure trip, including visits to the Grimsby fisheries harbour and the Fisheries College in Hull. The year end saw me saddled with new responsibilities. I got married! To this list of important events in my life needs to be added the meeting at Trivandrum in November that led to the formation of ICSF. By virtue of SIFFS being a co-sponsor of the meeting, I was an automatic invitee and became—by default—a Founding Member of ICSF.

Looking back, I can say that my initial career as an ICSF Member was somewhat lackadaisical. With seniors like John Kurien and Nalini taking a keen interest in setting up the new organization, I was quite happy to be a passenger, focusing my energies on SIFFS, which was still struggling to establish itself. Still, my closeness to Nalini, John and Pierre Gillet ensured that I had a ringside view of the development of ICSF from its early days.

The start of an exciting initiative in West Africa, the launch of *SAMUDRA Report*, the various international meetings and studies, the setting up of the Madras office, etc. come to my mind. The 1990 Bangkok meeting and the 1994 Cebu meeting were part of my early exposures to international fishery issues. Subsequently, I became a member of ICSF's Animation Team and my involvement became more intense. The participation in the FAO's Code of Conduct process and visits to Brazil and Canada added to my understanding of fishery issues. Still green in my memory is the meeting I attended in the Maritimes with Mike Belliveau, in which wharf representatives of the Maritime Fishermen's Union discussed the pros and cons of a six-inch escape hole for juvenile lobsters in their lobster traps. This was my first exposure to a co-management system.

I can safely say that ICSF has given me great opportunities to learn and widen my fisheries understanding, which influences my work in SIFFS and the Indian fishery in many ways. But for the international exposure I received through ICSF, I would have remained a frog in the well, incapable of relating to entirely different contexts. ICSF has also given me a wide range of contacts internationally and helped open doors that I did not know even existed. Perhaps the most enjoyable aspect of being an ICSF Member is the wonderful comradeship that it automatically entitles you to and the warm personal relationships you develop with individuals across the world.

ICSF has clearly developed over the years into an organization with a strong presence in the fisheries world, and has a larger-than-life image disproportionate to its small size and budget. This is clearly the result of the dedication and creativity of many ICSF Members and the professional staff who run the Brussels and Madras offices. Looking back, one can say that ICSF has made an impact in areas that were not foreseen and hardly any in areas that were the original priority. I had assumed that ICSF would, in some way, catalyze the growth of national organizations of fishworkers across the globe. This would perhaps have been through providing inspiration and critical support to individuals who worked with the fishing communities and through capacity-building support to fledgling fishworker organizations. ICSF's West Africa intervention seemed to be consistent with this course of action. Somehow, we were unable to stay the course, and West Africa remains an exception or even an aberration.

Another area that we had great hopes was in research that would help ICSF play a prophetic role in the fisheries sector, setting the development agenda in favour of the small-scale sector and sustainable fisheries. Shrimp aquaculture was still in its infancy as a global industry and its negative impacts hardly understood. ICSF decided to be an early entrant in this arena and provide sage advice that might have avoided all the subsequent troubles. Unfortunately, the early bird did not catch the worm! Very obviously, we were naïve in assuming that an international organization could be run just on the basis of voluntary work by members who had their own jobs to do and lives to lead.

The areas that ICSF finally made a mark in are in lobbying at the international level and providing valuable information on the fisheries sector. This is the result of the change in the external environment and the skill profile and inclinations of the full-timers who joined the Madras office. When ICSF was set up, the issues facing small-scale fishermen were similar but the actions required were at the national level. The vision was, therefore, a network of members in the Third World who were active at the national and local level, supporting the fishworkers on these issues. The First World Members would, in turn, support these local and national struggles in their own way. However, the start of the Madras office coincided with the fall of the Berlin wall and a new world regime based on entirely new principles started emerging.

While national-level actions remain essential, action at the international level

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to protect the interests of the small-scale fishermen (even if many are not so small anymore!) and fishing communities has become a new requirement. ICSF was best placed to play this role and it has realized its potential in this regard. Apex organizations (structured as apex or otherwise) operating at higher levels have greater relevance in a globalized world. Local action increasingly needs to be supported at higher levels through networking and federating. Providing timely information on the decisions taken at the higher levels and equipping the local organizations to influence these decisions, as well as to prepare for their consequences, have become important. The formation of the World Fishworkers Forum (WFF) and the World Forum of Fisher People (WFFP) need to be also seen in this light. As an organization of supporters, ICSF now has additional channels to reach the fishing communities and to enter into a dialogue with them. Documentation and information dissemination have obviously become key requirements, and ICSF is doing a great job in these areas.

The limited base of fishworker organizations and the limitations in their form and functioning continue to limit the effectiveness of ICSF in bringing real change at the grass-roots level, despite great successes in the international arena. Very clearly, the early vision of ICSF promoting fishworker organizations across the globe is not a feasible one. Now that the limitations of the 'fishworker' type of organization have been realized, other forms of fisherfolk organizations are also required, but not much consensus exists on this. Despite useful contributions like Conversations (an ICSF publication), conceptualising fishworker and fishing community organizations remain a major weakness in ICSF. Our strength, largely based on the skill set of the full-timers, is 'sectoral' rather than in 'communities' and 'community organizations'. The theme for the 1998 Trivandrum General Body was chosen in recognition of this, but we could make no headway in developing intellectual capital on the theme of organizing fishworkers and communities.

While we can still discuss the best way to promote fishing community organizations, we should make the best use of our strong points. Our international lobbying and the Documentation Centre activities are best complemented by a vigorous capacity-building programme for community leaders and potential NGO staff. Our limited foray into this territory has shown good results, and we need to significantly scale up this activity, and hope it will result in more actors at the grass roots taking up the challenge. However, this will require significant scaling up in terms of human resources, and one wonders about the sustainability of ICSF at a higher level of overheads. This is something that requires creative thinking at the Fortaleza General Body Meeting.

My salute to all who have contributed in making ICSF what it is today!



Enigmas by Pablo Neruda

I want to tell you the ocean knows this, that life in its jewel boxes

is endless as the sand, impossible to count, pure, and among the blood-colored grapes time has made the petal

hard and shiny, made the jellyfish full of light and untied its knot, letting its musical threads fall from a horn of plenty made of infinite mother-ofpearl.

I am nothing but the empty net which has gone on ahead

of human eyes, dead in those darknesses, of fingers accustomed to the triangle, longitudes on the timid globe of an orange.

I walked around as you do, investigating the endless star, and in my net, during the night, I woke up naked, the only thing caught, a fish trapped inside the wind.

- Translated by Robert Bly

Sound Bites (...contd. from Page 4)

the communities to establish resorts. SDF intervened, believing that the community had the right to the land.

On SDF:

The main goal of the organization is to advocate for community rights in the form of access and management of natural resources. At the microlevel, it concentrates on awarenessraising campaigns, networking and presenting alternatives to managing natural resources. At the macrolevel, it lobbies support from other organizations on emerging issues, and campaigns for these issues to be articulated in public policy. Some of the macro-level campaigns focus on aquaculture in coastal areas; a community right law, where communities are fully consulted in any decision-making process; the decentralization of the formal sector into the informal; and, in the posttsunami phase, human-rights approach in rehabilitation. SDF has a strong gender perspective as it believes that women are often the most vulnerable in fishing communities.

— From an interview of Ravadee Prasertcharoensuk, Director of SDF, Thailand, by Moenieba Isaacs of the University of Cape Town, South Africa

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Conservation should be 80 per cent negotiation, 10 per cent common sense and 10 per cent science.

— Antonio Carlos Diegues



Samudra for Fortaleza is a special publication brought out by the SAMUDRA Team for ICSF's 20th Anniversary Meet at Fortaleza, Ceará, Brazil served as the legally recognized management authority. He highlights how in the local elections of May 2001, the resource users used their voting power as a form of people power and voted back to office the incumbent mayor, who had not given in to the pressures of the illegal fishers.

hat is even more educative is the reflection both on the positive and negative steps undertaken by the group, and how issues that cropped up in the process were handled in reality. At the very start, Heinen writes: "Initially, the project fell into the trap of presenting environmental rehabilitation as the solution. Fortunately, the intervention became a venue for learning. Learning from nature and human interaction, the change agents climbed out of the trap and worked towards a more sustainable intervention." good-intentioned assures This practitioners that they undergo a process of change themselves and clarify their objectives as and when they genuinely respond to the people's needs and the reality. While explaining how the Pipuli staff and a few fishers from Barangay set up a sanctuary and faced major resistance, and later analyzing why it happened, Heinen concludes: "Had the Pipuli programme analyzed the situation in this way, more attention could have been given to the difference in lifestyle between the people from Landing and those from

Mison, and appropriate mitigating measures could have been introduced." This prepares the new practitioner for possible eventualities.

Towards the end of the book, the author includes a series of appendices. Among them is one that gives a chronological overview of the entire process, which stretches from 1990, with the first contact between the fisher/church workers from Baliangao and Pipuli Foundation through ecological awareness seminars, to 2001. when the local government and Pipuli staff are informed that the Baliangao Wetland Park had been declared a national park by Congress. That was when, for the first time in Baliangao, the month leading to the elections was not marred by the intensive use of explosives for fishing. That was a clear indication of the slow but meticulous process of community and intervention organization that had taken place in Danao Bay, which helped create both a sustainable coastal fishery and a sense of pride among the people of their vocation as fishers. The appendix that narrates the history of the use and status of the resource of the Bay situates the entire experience in a context.

Laudable effort

Having worked closely in coastal communities myself, I can only appreciate and applaud the effort and belief of both the external agents and the community of Danao Bay in restoring the fishery through persistent community intervention.

This was facilitated by the National Fisheries Code that demarcated the municipal waters, without which such an involvement of the community could not have been legitimized. This again was the result of several years of action by fishworker organizations and their supporters.

What I missed was understanding how the community handled shore-based activity that relates to, and has impacts on, the fishery and the community—for example, the pollution of the water and the shore, the operation of the landing centre, and the disposal of the catches. Gender equity appears to have been present in the creation of the management plan and the management body.

However, we do not get to understand how the management of market mechanisms ensured that the final monetary returns went to the community, especially to its women, and were not siphoned off by middlemen and merchants, as generally happens.

To be sure, the focus of the book is on the management of fish resources, but one wonders how the other resources of the Bay, particularly the mangroves and marshland vegetation, were also used. For sustainable fisheries to lead to sustainable livelihoods and lifestyles, one would probably have to take into consideration the total biomass of the area, and how it is used and recycled. While I feel sure that several of these aspects must have been included in the Danao Bay programme, unfortunately, they are not covered in this book.

I had the opportunity to meet some of the people of the Danao Bay community and the Pipuli Foundation, and it was amazing to see how empowered they had become as a result of the CBCRM programme. Many a scientist and academic could learn effective skills of applied science from them—not in a disjointed, specialized way, but in an integrated manner. The book does succeed in achieving what it set out to do, namely, to provide the reader useful theory and experiences in CBCRM. To Arjan Heinen, who was engaged in the process and has taken the trouble to document it so understandably, a big "Thank You!"

This review is by Nalini Nayak (tvm_nalinin@sancharnet.in), a Member of ICSF

Mining the gold of the sea

In their search for sustainability, artisanal fishing communities in Ceará, northeast Brazil, are combining tourism with fishing to enhance incomes

The artisanal fishery in Brazil contributes to over 50 per cent of the total capture of fish and crustaceans, and accounts for about 90 per cent of the country's fishers and fleet. Artisanal fishing dates back to before the European discovery of Brazil around 1500, as indigenous peoples explored the coastal areas for their subsistence, using rafts made of wooden logs tied together with ropes. The rafts were called *piperi* or *igapeba*. When the Portuguese fleet landed on the shores of Brazil in 1500, they christened the rafts jangada, after janga or jangadum, similar craft they had seen in India, in the province of Goa.

By the early 17th century, responding to the increasing need for fish from a growing population, some ingenious boatbuilder added a sail, a centreboard and other helpful accessories that allowed the jangada to sail windward and start to plough the ocean. With the colonization of Brazil, slaves began to be employed in fisheries. The prize of a slave fisherman varied with specialization, depending on whether he was a shrimp fisher slave, a shell collector or raft-builder, and so on. By the 18th century, fishermen were obliged to the middlemen who controlled every aspect of capture (boats, fishing gear, fishing spots) and, of course, the sale of the product. Around 1840, the government discovered fishermen as ideal inputs for the navy and began to create "Fishing Districts" in a recruitment drive for warship crews. Almost 80 years later, around 1919, the navy embarked on a military mission called the "Crusade of José Bonifacio", establishing colonias de pescadores, (fishermen's colonies) along the country's coast to enlist fishermen and their sons for the navy and to tie them, once and for all, to the national defence system. Even after the navy turned over control of the fisher colonies to municipal

SAMUDRA Report No. 44 July 2006

governments, the fishermen did not learn how to become independent, and continued to be exploited by middlemen and politicians. Even as the lobster fishery and its potential for export was discovered around 1955 by an American called Morgan, fishermen continued to work hard capturing lobsters without getting a just price for their catches, as the middlemen made sure they were kept dependent on them for traps, bait and cash advances.

A movement organized by fishermen from the north and northeast of Brazil in 1986 finally gave them their first victory on the way to independence, as the revision of the Federal Constitution of 1988 recognized the right of fishermen to organize in fisher colonies through democratic elections. However, many colony presidents managed to remain in power through pseudo-elections and continued to enrich themselves at the expense of the fishermen they were supposed to represent. Only in 1992 did fishers start to speak up about their exclusion from fisheries management, and started to mobilize to become part of the decision-making process of fishery and coastal development.

Strange odyssey

Ten years have passed since the odyssey of four men and two women from a small fishing village, looking for answers for their artisanal fishery. The sail-raft named *Communitária* (Community) left from the beach of Prainha do Canto Verde in the State of Ceará at high noon on 4 April 1993 with four fishermen (Edilson Fonseca Fernandes, Mamede Dantes de Lima, Francisco Abilio Pereira and Francisco da Silva Valente) aboard, accompanied along the coast in a small car by two women from the village: Marlene Fernandes de Lima, then president of the village Brazil

association, and Michelle Schärer, a graduate in marine biology from the University of Central Florida.

The girls were responsible for logistics and support services such as food supplies, communications, press relations, medical service and the organization of meetings with fisher, environmental and human-rights groups along the route, with over 20 intermediate stops. Seventy-four days later, the brave travellers arrived in Rio de Janeiro, where they were welcomed by a large crowd, representatives of NGOs, authorities, the media and Doryval Cayimmi, an immortal composer of Brazilian popular music, many of whose songs were about the romantic *jangadas*.

The expedition was a spontaneous reaction and protest against predatory fishing, real-estate speculation, exclusion of the community from tourism development, and the lack of support for artisanal fishermen. Fifty-two years earlier, four fishermen from Fortaleza had made a similar trip to Rio to claim retirement benefits for fishers. That voyage, led by master Jacaré, was to gain worldwide fame, including coverage in the 8 December 1941 issue of Time magazine, and because of the American movie director Orson Welles, who filmed the story during a stay in Brazil, amid controversy about the tragic death of Jacaré after the jangada Saint Peter was turned over by a wave. The film was finally finished by another team from Paramount and released under the title It's All True in 1994.

The expedition had been planned and carried out by a small group of community leaders. idealists and volunteers from the Federal University of Ceará who worked hard to make the trip a success. Eight NGOs gave moral support to the expedition, while government agencies' staff and other fishery stakeholders chose to stay away. Naval authorities who had never envisioned independent fishermen, tried to abort the trip at the last moment, but this time the fishermen decided not to obey. During the 74-day trip, four workshops were held with the participation of civil society, NGOs, fishery specialists, fisher community leaders and invited government representatives, to discuss the themes of the protest. Concrete proposals from the workshops for solutions were subsequently sent to federal, State and municipal authorities, and NGOs and fisher organization throughout Brazil.

Meanwhile, the fishermen and friends patiently made alliances with other villages, NGOs and some fishery managers. With two years gone by and no real government reaction to their demands, the fishermen decided to protest once more. On 4 April 1995, 500 fishers, women and activists marched to the seat of the State government and received the promise for action by the Governor's deputy. Shortly thereafter, the "State Fisheries Committee" was created by a government decree and, for the first time in Ceará's history, all fisheries stakeholders sat down at one table. The NGO Instituto Terramar, founded in 1993 as a result of the historic expedition, was now leading fishers' organizations, and many of the subsequent developments were a direct or indirect result of that adventurous voyage.

After adding a sail and a centreboard to the *jangada* in the 17th century, few modifications have been made to this remarkable craft. The major change has been to replace tree trunks with planks around 1950, which added comfort and speed to the boat.

The *jangada* continues to be the ideal boat for fisheries close to the coast (within 20 nautical miles, in the case of the coast of Ceará) as other boats are too costly to build and operate. The Ceará fishery is essentially a day fishery or, at most, a one-night fishery, where the technological limitations of the craft are not an obstacle, as fishing spots are marked in the minds of the fishermen.

Technology problem

However, the *jangada* is used less in the fishery up to 60 miles out on the continental shelf, due to the difficulty of unfurling the sails for 10 to 12 straight hours and spending four to five uncomfortable days at sea, exposed to the elements. Without land in sight, the lack of technology to locate and mark fishing grounds becomes a real obstacle. So the

fishers of Prainha do Canto Verde, with a little help from friends, have adapted a sail catamaran for the fishery, with excellent results. Improved security, comfort and stability, coupled with modern technology (everything except a motor), easy maintenance and low operating costs make this boat ideal for the multi-species fishery.

• conomically too, the sail catamaran beats motorboats by a wide margin. The sail catamaran is, without any doubt, the boat of the future to explore the continental platform of Ceará and Rio Grande do Norte. Another advantage of modernizing the fleet with catamarans is potential to create jobs for the boatbuilders in the coastal communities. Substitution of motorboats in the coastal area with sail catamarans will reduce both unemployment and fishing effort at the same time. This substitution with a 'soft' technology will greatly increase food security for three reasons: (a) more fishermen can be deployed per trap; (b) jobs can be generated new for boat-builders; and (c) the overall fishing effort can be reduced.

However, other obstacles exist that prevent the development of small-scale fisheries in Ceará. The main hurdles are low literacy rates, lack of professional training, little extension work of fisheries scientists in coastal communities, and the historical perception of fishermen that

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everything will be alright as long as they follow instructions and leave the rest to God. The commonly used expression in Portuguese "Deixa conmigo" ("Let me take care of it") typifies the continued dependence that has led to extremely low self-esteem of small-scale fishers in Brazil. But fishers have a good understanding of ecological processes and can talk hours on end about what fish do and eat and is the right time to catch them. Fishers understand the concept of overfishing and sustainability, but they cannot articulate their innate understanding in a written form. Experiences in the lobster fishery along the eastern seaboard of Ceará over the last ten years have shown that investments made in awareness and technical training lead to greater self-esteem and co-operation with fishing regulators in enforcement actions.

Predatory fishing

Some artisanal fishing communities in Ceará have been actively involved in efforts to curb predatory fishing since 1993, through community meetings, partnerships and financial contributions for enforcement trips. These efforts led to two major events in Ceará that discussed and promoted responsible fisheries. The first was in 1997, when Instituto Terramar, together with the International Collective Support of Fishworkers (ICSF), in organized. the First International Conference on the FAO Code of Conduct for Responsible Fisheries, which brought

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together over 300 participants and the support of IBAMA (the Brazilian Institute for the Environment, responsible for fisheries).

The second event occurred a year later, in the form of the "Lobster Caravan". two-month. а 20-community roadshow to raise awareness among fishers and their families of the need to preserve the lobster fishery. The caravan was a team effort, led bv the Fisheries and Education Departments of IBAMA and Instituto Terramar, with fishers and NGOs, along with promotional support from local government and other stakeholders. In a recently inaugurated community fisher school in the village of Prainha do Canto Verde, high school student fishers show self-confidence and are developing their own projects to construct fishing gear, artificial reefs or mounted structures for seaweed farming. Rather then being the cause of the problem—as fishing industry officials are quick to point out-artisanal fishermen are becoming part of the sustainable solution for fisheries Unfortunately, management. the expectations awakened by the creation of the Special Secretariat for Aquaculture and Fishery at the ministerial level did not fulfill the campaign promises made by Brazil's President, Luis Inácio da Silva, popularly called "Lula". Preference is still for industrial fishing, big companies and unsustainable shrimp-farming operations, and the entrepreneurial lobby is growing stronger.

There is agreement among all stakeholders that fishing effort is the number one problem in our lobster fishery. But there is no agreement on how to reduce the effort. As a matter of fact, the fishing industry points the finger once again at the artisanal fishers.

As already shown above, the ideal craft to capture the great variety of fish and seafood in the coastal zone are sailboats (*jangadas* close to the shore and catamarans towards the end of the continental shelf). Their low operating cost and great economy, as well as the low fishing effort they expend and their versatility, make them ideal for a multispecies fishery, and also offer the opportunity for fishers to combine fishing with other revenue-generating activities like tourism and sport fishing. Thus, fishermen can quickly switch from lobster fishery to some other activity if there is a need to reduce the fishing effort.

The continental shelf on the coast of Ceará and Rio Grande do Norte (a major lobster fishing area, with many nurseries) is very vulnerable to overfishing by the motorized fleet. The motorized fleet explores only the lobster fishery, and many fish with illegal gear and techniques (like mechanized diving) in the coastal area. Boats of 12-15 m length, carrying 600 to 1,000 traps, add more pressure on lobster stocks and compete for space with small *jangadas* fishing with 40 traps.

Worse, the State finances this madness by subsidizing fuel for the lobster fleet. If subsidies are used, they should be applied to reduce effort or explore other resources. The money could be applied for co-management education programmes for the fishery or to encourage low-impact craft and gear. There is also a need for better control of the sail fleet in the coastal area and for better management and enforcement of existing laws and regulation, in co-operation with fishers. Food security in the coastal area cannot be maintained at its present high level if artisanal fishers are expelled from the highly lucrative fishery. Stakeholders for the industrial and commercial fishery will need to sit down and look at their future with a long-range vision for a sustainable fishery. So far, there has not been much of an effort from industry and vessel owners to do so.

Gold of the sea

Lobster is popularly called the "gold of the sea", because of its high value. Since Ceará's fishing communities have all but eliminated intermediaries, the fishers receive about 90 per cent of the export price of US\$32 per kg of lobster tails in 2001. At the end of 2004, artisanal fishermen would fetch around US\$50 per kg of lobster tail, half the value of the official monthly minimum salary of US\$100. Premium fish species, on the other hand, fetch US\$2 to US\$3 per kg. With lobster catches decreasing since 1991, nobody fishing with traps has become rich, since the cost to equip a motorboat with legal fishing gear is very high. Thus more and more motorboat owners are either going out of business or turning to illegal fishing.

review of the chain of custody is crucial to understand the contribution of fish trade to the food security of the coastal population of Brazil. The middleman is a figure that has haunted fishermen since the 17th century, and only in the last decade has this started to change. Under the command of the navy, there were fixed percentages of the catch that had to be delivered to the president of the fishermen's colony or the local co-operative, and to be distributed to dignitaries and government officials. Only the leftovers were meant for the fishermen to keep.

Only in the 1970s did the Pastoral Fishermen's Council (CPP) in Olinda, Pernambuco, make a first attempt to organize fishermen into co-operatives and support their struggle for honest elections in the fishermen's colonies. This also led to the first attempt to train leaders of fishing communities to become informed citizens. Some of these leaders are still part of a network of fisher movements such as Movimento Nacional de Pescadores the national fishermen's (MONAPE movement), Fishermen's Forum of the State of Ceará and groups of fisher colonies in the States of Pernambuco, Alagoas, Pará and Maranhão that have close ties with the CPP.

Ceará's fishers depended on middlemen for various reasons: distances from ice plants; lack of transport, working capital and administrative skills; as well as mistrust and individualism. Finally, realizing the increasing importance of income from the lobster fishery, several communities on the eastern seaboard already working together to fight predatory fishing, started to exchange experiences on how best to do away with middlemen. Fish merchants have the advantage of easy credit from lobster exporters, who were very generous with the millions of dollars they received in government subsidies, which they used to provide lobster traps, bait and cash advances to the fishers who were chronically in debt. So while one community started to build their own traps, another got some working capital, and this way, they slowly started to cut out the middleman. Communities, for the first time, joined together to negotiate prices directly with exporters.

Price increases

For some communities, this meant an increase of up to 50 per cent or over US\$10 per kg of lobster tail. The same happened with the marketing of fish, with substantial increases in the price of fish, in the range of 50-70 per cent at the time of breaking the monopoly of the fish buyers. The number of communities marketing their own production is increasing continually. They travel and meet to

exchange knowhow on boat and fishing gear technology and alternative income generation from other marine resources such as seaweed and oysters.

he exchange of market information, especially about lobster prices, guarantees top market prices. On two occasions, fishermen even threatened to pull their traps, unless prices were adjusted for increases in the exchange rate of the local currency. (Prices for lobster are quoted in US dollars.) Some leaders have contacted exporters to discuss closer co-operation in the handling of lobsters and control of their source of origin, in order to cater to quality-conscious niche markets.

One community even went through a certification process. Lobsters fished by the artisanal fleet are landed live and are of the best quality. The high value of lobster and some demersal fish from artisanal fisheries has allowed many fisher families to improve their living standards and food security. As only lobster tails are exported, there are a great number of lobster heads available for local consumption, and it is quite normal for poor families from nearby villages to walk 10 km to the beach where they get lobster heads to take home; solidarity still works here and helps food security. The same cannot be said for the motorized fleet, which discards a lot of lobster heads at sea.

Boats equipped with rudimentary and life-endangering diving gear, have the lowest investment cost and the highest capture capacity. Divers who die or are paralyzed for the rest of their lives from diving accidents, are quickly replaced from a waiting list of young men willing to risk their lives. Due to poor enforcement at sea, the chances of getting caught are slim, and the likelihood of being prosecuted for environmental crimes, even smaller. Two divers can easily haul in 600 kg worth US\$ 18,000 in two days of diving. Jangada fishers, however, will have to work the whole year to catch that much in a good season. The average yearly catch for a motorboat with 400 traps is between 1,500 and 2,000 kg for 11 trips of 14 days each.

The other big business is the export of undersize lobsters to the US. According to calculations by an industry source, the profit potential per container exported is very high.

Special advantage

Illegal exporters thus enjoy considerable advantage in deploying their profits to be more competitive and increase their market share. NGOs have established a working relationship with agents in the US, which is the principal market for Brazilian lobster, and are working to convince the government to negotiate an agreement for co-operation in the inspection of export shipments to the US. The Lacey Act allows the US Justice Department to prosecute offenders against environmental laws in other countries, such as importers of undersized lobsters.

The Wall Street Journal wrote on November 1, 2001: "Fisheries experts here (in Brazil) say the US, as the biggest importer of Brazilian lobsters, is unwittingly contributing to the demise of the *jangadeiros* because of its appetite for small lobster tails. The US has created a market for really small tails, so back in Brazil they keep catching them," says Paul Raymond, special law enforcement agent.

More efficient prosecution of illegal fishers and exporters will considerably improve food security by allowing artisanal fishers to capture more lobsters locally. Responsible exporters will also benefit.

Development of resort tourism presents risks to food security in the coastal areas of the state of Ceará. Due to the high value of beach property, real-estate speculation has displaced communities from their living spaces on the coast and has only marginally contributed to the income of fisher families.

In their search for sustainability, artisanal communities are combining tourism with fishing to enhance incomes. According to a case study published last year, two pilot projects in Prainha do Canto Verde and Ponta Grossa have proven that income-generating complementary tourism activities can be undertaken by communities while at the same time the environment preserving and valorizing the cultural identity of fisher families. This experience is now being extended to other communities.

Other activities that bring in additional income are agro-ecology, handicrafts and information and communication technology. Land tenure is, of course, necessary for coastal communities to develop economically and is crucial for their survival.

Clearly, the survival of artisanal fishing communities is closely linked to the sustainability of marine fisheries. If we can harness fishermen's instincts and take advantage of their traditional knowledge, we will be able to guarantee food security for tens of thousands of coastal residents of Ceará.

Brazil

This article is by René Schärer (fishnet@uol.com.br) of Instituto Terramar, Ceará, Brazil, a Member of ICSF **Co-management**

No magic bullet

This piece discusses whether co-management is the solution to poverty alleviation in fisheries

n a 2004 report, the Food and Agriculture Organization of the United Nations (FAO) stated that one-quarter of the world's fish resources are overexploited or depleted, and that this fraction has been increasing steadily since the mid 1970s. In another document, FAO estimates that there are about 150 mn people living in households that are primarily dependent on small-scale fisheries and that, among them, about 23 mn have an income lower than US\$1 per day. Globally, therefore, the world's fisheries are confronted with a problem of both ecology and poverty that has enormous proportions and that should give us cause for worry as well as action.

However, the question that immediately comes to mind is: Could there be a connection between these two phenomena? Is overfishing to be blamed for the poverty problem? Would we then automatically solve the latter if we solved the former? If so, the challenge would be easier to handle, as we would have one, rather than two things, to concentrate on.

Perhaps, though, the situation is the reverse: Poverty drives overfishing. Poor people cannot afford to show restraint; they have to put food on the table every day. If this is the case, we would need to address the poverty problem independently of, and prior to, the overfishing problem. If not, we risk exacerbating the poverty problem, at least in the short run, and poor people would pay the highest price. But maybe the two problems are unrelated. Fishing people are poor not because of overfishing but for entirely different reasons. For instance, they are deprived because they happen to live in countries that are poor, because nobody cares about them, or because richer and more powerful people take advantage of them. I assume that most readers would nod in the affirmative to all these factors. Indeed, poverty is a complex phenomenon. It has many reasons, and is both the cause and effect of resource and environmental problems. Small-scale fishing people are poor for the same reasons that other people are poor, but they have some factors to cope additional with Consequently, in order to alleviate fisheries-dependent poverty in communities, it is necessary to secure the resource base that poor people live on, but this will not be sufficient. Poverty must be confronted more broadly. The question of whether co-management is the solution to alleviation in fisheries is, poverty therefore, easy to answer: Co-management will hardly eliminate poverty in fisheries-dependent communities. Co-management is no magic bullet; much more is needed.

The question, however, should be rephrased: Will co-management make a difference? Will it be a contribution? I think the answer must be: Maybe, it all depends on how co-management is designed. First, one must make co-management work as a tool, which is a challenging task in itself. Co-management is a demanding project. Much can go wrong, and experience shows that success is not guaranteed. And if one should succeed, there is no guarantee that co-management would benefit poor people. For this to happen, co-management must be designed with poor peoples' interests in mind. But how does one do this?

Broad participation

Co-management is a way of ensuring broad participation from user-groups and stakeholders who, together with government, knowledge and interest organizations, form a kind of public-private partnership where resources are pooled, responsibilities shared, and actions co-ordinated.

uch partnerships can assume different organizational forms. There are no specific formulae, only some organizational principles to build on. Co-management is now gaining popularity in many parts of the world, partly for the reason that it is seen as a tool in fighting poverty in fisheries communities. In the FAO note referred to above, it is stated: "Pro-poor strategies that include rights-based approaches, co-management regimes and fishing capacity reduction are essential to increased wealth from small-scale fisheries for poor communities." This quote clearly demonstrates the relevance of the question whether co-management is the solution to poverty alleviation in fisheries. The answer, I would argue, is not necessarily in the affirmative.

With regard to co-management, the problem with poor people is not that they are materially poor but that they are politically poor. They lack the social and cultural capital needed to function effectively and competently in decision-making processes. **Co-management** involves formal procedures. It requires stakeholders to be able to understand written documents, and for that, they need to be literate. If not, they are vulnerable and easy to

manipulate. Co-management also builds on the principle of 'communicative rationality' to borrow a concept from the German philosopher Jürgen Habermaswhere stakeholders talk to each other and try to strike some consensus or compromise. For that, they would need to understand what other stakeholders and experts say, and be able to argue well for their own views and interests. Furthermore, even if poor people are many, and thus potentially represent a powerful force, they are typically not well organized. They do not have anyone to represent them or to speak for them. They are, in other words, 'disempowered', incapable of exercising their potential power because it requires collective action and discursive power. Poor fishers are much like the French smallholding peasants that Marx talked about in his The *Eighteenth Brumaire of Louis Bonaparte:* As a social class they are nothing more than an "acretion, much as potatoes in a sack form a sack of potatoes." They do not form an integrated whole, a united social class with а common identity and consciousness, capable of acting "in corpore".

Empowerment

If this comparison is valid, small-scale fishing people are not only poor because they overfish but because they are unable to break the chains that hold them back. As a consequence, co-management must also involve empowerment and the redistribution of power which are not entirely synonymous terms.

the danger is that not. co-management may lead to more disempowerment and, thus, to more deprivation, since there is every reason to expect that already wealthy and powerful to people know how make co-management work in their own interest. But even with a deliberate poverty profile, the question remains: Is co-management sufficient? Is empowerment only an organizational issue?

My most intense confrontation with poverty is with the Rama Indians on the Caribbean coast of Nicaragua where for, the last six years, I have been involved in a collaborative project with one of the local universities. Nicaragua is one of the poorest countries in that region, and the Rama people figure at the bottom end of Nicaragua's poverty scale. The Ramas are not only economically poor, they are poor in almost every sense of the term: they are about to lose their land and their natural resources; their traditional indigenous language is almost extinct, which makes them lose their identity and self-esteem; their communities are ridden with internal conflict; and they are in desperate need of a more professional leadership, skilful at voicing their concerns and representing their interests nationally and internationally. Thus, the conclusion is obvious: Poverty alleviation among the Ramas must have an economic component. They definitely need more food security, and fish has traditionally been a staple diet and it is also a source of income. But they need more than that. In their case, poverty alleviation must also involve social, cultural and legal The Ramas need help dimensions. building their communities; they must have their communal land and resource rights secured; and they need assistance in revitalizing their culture and strengthening their formal competency. All these things are related; they are about empowerment; and if you should succeed with one, it will be easier to succeed with the other. One thing should not be forgotten though: The Ramas have had lots of international donors sympathetic to their situation, and who have visited their communities. But after they leave, things soon return to how they were. Over the years, the Ramas have developed into a dependent culture of sorts; instead of initiating development themselves, they passively wait for the next donor to appear. They have thus ended up in a vicious cycle that has left them increasingly disempowered.

Broad reform

The example of the Rama people serves to illustrate that poverty alleviation requires broad social reform and not just some technical fixes such as co-management. Co-management offers no direct solution to the poverty problem. Co-management scarcely offers even a solution to the problem of overfishing since it is primarily about how to make decisionsand not what decision to make. At best, co-management offers a partial solution to a problem that is a part of a bigger problem. Co-management may lead to empowerment if it is designed to redistribute power, address issues of equity, and stimulate participation and learning. This is a necessary condition for sustainable fisheries management, which is an essential but not complete condition for alleviating poverty in small-scale fisheries. But poor people must be allowed in; management cannot make them more dependent and, thus, turn them into passive clients. Instead, poor people must obtain control and real participation in the decision-making process, or else there is a danger of co-management making them even more marginalized. 3

> This piece is by Svein Jentoft (Svein.Jentoft@nfh.uit.no) of the Centre for Marine Resource Management, Norwegian College of Fishery Science, University of Tromsø, Norway

Driftnet fishing

Other ways of fishing

The EU ban on driftnets has resulted in a fishing revival and points to the way forward for European fisheries

In 1998, the European Union banned tuna driftnets in the Mediterranean and the Atlantic. While those using this type of equipment were hit hard, including the driftnetters from the island of Ile d'Yeu in Brittany, France, it opened the way for other types of fishing operations for long-finned tuna stocks, notably in the Bay of Biscay.

As a result, today there are around 200 boats, half of them under 10 years old, fishing for long-fin tuna with lines. This seasonal fishing activity is carried out from the end of May until the end of October. The boats follow the long-fin tuna migrations: in the Azores at the beginning of the season, then up towards Ireland in September-October.

Landings also follow an east-west pattern: starting in the Galician port of La Coruña, where, like the swallows, the long-finned tuna returns in spring. The landings then move to Gijón, Santander and Bermeo, eventually ending in the Basque Country as the autumn leaves fall.

Long-finned tuna is fished with troll lines and hauled on board using hydraulic reels. Each boat has four or five fishermen, mostly young, three of whom watch over the mechanical hauling of the lines, each fisherman being responsible for a number of lines. As soon as they see a tuna hooked, it is immediately hauled aboard, gutted and chilled.

This troll line fishery is not new, being based on an ancestral artisanal fishery. In the past, it was manual, with each tuna hauled on board by hand. Today, the mechanization of the line hauling means that the work is less physically demanding, and this has attracted people into the profession. Boats like these, 18-26 m long, catch, in a good season, approximately 700 kg of long-fin tuna each day. While these quantities may appear small, the tuna caught by line is top quality, in contrast to the net- and trawl-caught tuna, which are often damaged.

Line fishing of long-fin tuna provides well for both the crew and the boat. What is more, the boats are not great fuel guzzlers: pulling along a small number of lines out behind does not require too much precious energy. In today's world, this counts high.

In winter, when long-fin tuna swim under distant skies, these boats use *bolinche* (purse-seine) for anchovies or sardines. Some others have, for several years now, used a system of automated lines for mackerel, the results of which look very promising.

In the last couple of years, three or four boats from the island of Ile d'Yeu have started to fish long-fin tuna with troll lines. During the summer of 2005, Irish and French scientists did some fishing trials with gear similar to the ones used by fishermen from the coast of North Spain, with very positive results.

The development of a fleet using selective methods such as these is possible, if the pelagic trawlers stop their destructive fishing, which tends to flood the canning market with mediocre-quality long-fin tuna.

Fisheries like this—relatively low on intensity and fuel consumption, and based on traditional techniques that have been improved upon yet retain their selective features, all of which enables top-quality products to be

Europe 3 This article is based on an interview with Robert Alvarez, retired small-scale fisherman from Saint Jean de Luz, and member of Itsas Geroa (The Future of the Sea). The interview was done by Béatrice Gorez (cffa.cape@tiscali.be) of the **Coalition for Fair Fisheries**

Arrangements

obtained-must surely point the way forward for European fisheries.

Ecosystem-based management

Be participatory and consultative

The following Statement was presented to the Seventh Meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (UNICPOLOS)

any delegations have referred to managing human activities as the key element in ecosystem-based management (EBM) of the oceans and coastal areas. These human activities could range from subsistence, artisanal and small-scale fishing to extraction of minerals from the seabed.

Given this range, EBM should consider applying the proportionality principle. Human activities that are most detrimental to the ecosystem should be dealt with on an urgent basis before taking up less threatening ones.

EBM should also take into account how best to address the problems of poverty and lack of food security in many coastal developing nations. There should be a strong impetus to meet the first Millennium Development Goal, namely, eradicating extreme poverty and hunger.

It should further be ensured that moving towards an EBM does not exacerbate social conflicts in coastal areas and that there are effective intra- and inter-sectoral conflict resolution mechanisms in place at different levels.

The implementation of marine protected areas (MPAs) has been mentioned by several delegations as an EBM measure in their coastal areas.

While some MPAs are created in consultation with coastal stakeholders, including traditional fishing communities, and make provisions for their participation in sustainable fishing, there are others that are designed to exclude fishers from their fishing grounds. Some of the no-take MPAs in developing countries have, in particular, been causing severe hardship to artisanal fishers by displacing them from, or denying them access to, their traditional fishing grounds. It is, therefore, important to consider creating MPAs in a participatory and consultative manner, sensitive to the needs and aspirations of coastal fishing communities, within a sustainable fisheries framework.

An important hindrance to realizing EBM goals in many tropical marine ecosystems would be the negative impact of bottom trawling within national waters, especially in the nearshore areas, which are the spawning and nursery grounds for many fish species.

The efficiency of bottom trawls not only has adverse implications for marine biodiversity, but it also diminishes the benefits of fishing in coastal waters to traditional fishing communities who employ selective fishing gear and practices.

Phasing out bottom trawling in tropical waters would be consistent with priority setting in marine fishing to move towards EBM. In this context, the example set by Mauritius in proscribing bottom trawling in its exclusive economic zone (EEZ) is worth emulating by other countries.

There should, simultaneously, be attempts to minimize the social impact of such a measure by providing alternative employment to fishers on board bottom trawlers, and by developing social safety nets for fishworkers.

Labour intensive

The development of labour-intensive and selective artisanal and small-scale fisheries in the EEZs and beyond, within an equitable and sustainable fisheries

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framework, should be seen as an enabling factor in moving towards EBM.

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Fishers' movement

Towards a global force

The following is based on an interview with Jose Alberto de Lima Ribeiro of Brazil's national movement of fishers

ccording to Jose Alberto de Lima Ribeiro, a fisherman from the community of Prainha do Canto Verde, the State of Ceará, Brazil, there are several issues facing the Brazilian artisanal fisheries, which are also causing the decline of fish resources. These are, mainly, (1) poor fisheries management; (2) lack of scientific studies on various species of commercial importance; and (3) lack of dissemination of the results of such research.

Ribeiro feels that Brazilian fishers are still using craft and gear that are not the most appropriate for the capture of the predominant species. They would like to find a way to improve the technology of their fishing vessels and gear so that they become more efficient, both in terms of environmental sustainability and in terms of fish catch.

Some of the gear that they currently use are not environment friendly, says Ribeiro. For example, lobsters can be caught both by bottom-set gillnets, which harm benthic organisms and substrata, and by lobster traps, which are environmentally friendlier and probably give the fishers and consumers a better-quality final product.

However, the market makes no distinction between lobsters caught by these two capture techniques, and the fishermen get almost the same price for both. This lack of incentive to use selective fishing methods should be addressed, Ribeiro feels. There should be efforts to improve gear to give more value to the catch, while ensuring less of a harmful environmental impact.

Importantly, says Ribeiro, it has to be borne in mind that the culture of the typical Brazilian fisherman is not always in favour of the sustainability of fishery resources. Typically, they may not think much about the future of the resources, and would go out and capture everything they can get. Therefore, they end up bringing in fish that is not the right size. They may not take the best care of the habitats on which they will continue to their livelihoods. This draw is compounded by the incentives that they receive from commercial exporters for exploiting fishery resources. The commercial exporters, whose motive is only production to make more profits, finance the fishers to take everything from the sea, irrespective of the season and size and quality of the resource. Such incentives force the fishermen to fish in a more exploitative manner, even if they are basically content to catch for subsistence.

Brazil's national movement of fishers, Movimento Nacional de Pescadores (MONAPE), is demanding from the government, effective enforcement of the fisheries laws that already exist in Brazil, says Ribeiro. This would strengthen the artisanal fishers' situation and allow them to continue their way of fishing. MONAPE is also demanding assistance for fishers who are ready to move to a more selective type of gear that is environmentally sound and less damaging to habitats and resources.

MONAPE is also looking at the prospect of establishing marine protected areas for sustainable exploitation, in which fishermen become part of the design and implementation, and benefit from the results of better protection of resources.

Better protection

Another critical problem faced by artisanal fisheries in Brazil is the lack of organized groups of fishermen and fisherwomen. There are several separate efforts, and a great deal of energy is wasted in these separate efforts.

f such individual efforts could be consolidated, Ribeiro feels, it would give the fishers more power to enter into sustained and meaningful dialogue with the government, which will be forced to listen to their concerns and address them. Such an organization of fisher movements is critical, and MONAPE is leaving no stone unturned to gather all these different initiatives under one umbrella so as to make the fishers and the communities they represent, strong enough to face the government.

One area where the fishing community has been found completely lacking is education. As a consequence, MONAPE is planning to take up educational campaigns for fishers and their families.

The primary objective is to make the community aware of the linkage between the nature and health of the ecosystem and their own livelihoods. This would help them understand the necessity to protect the resources and habitats on which they depend. MONAPE's campaign will aim for better educational and training material for capacity building, information gathering, and dissemination of related knowledge.

Another huge challenge that MONAPE faces is to create awareness about the importance of the role women play in the

artisanal fishery sector. Even though there are only a few women who actually go out and fish, most of the post-harvest processing and preparation of gear are carried out by women. MONAPE would like to flag this issue and make people aware of women's role in fisheries.

On the value and strength of international meetings like the one on "Emerging Concerns of Fishing Communities" conducted by ICSF at Fortaleza, Brazil, in July 2006, Ribeiro felt that sharing of issues and common concerns result in lessons and experiences that are valuable for fishing communities.

Ribeiro feels that such collaborations are improving every day and there will be more joint efforts with some of these organizations to deal with these issues.

According to Ribeiro, for all its work, MONAPE seeks support primarily from the government. It is represented in various councils of the government. It also seeks local State-level support to carry out its campaigns. It has already benefited from co-operation with the government in some campaigns. Much depends on how well-organized the movement is, and how strongly it can put up its case for co-operation and support.

Existing realities

MONAPE, says Ribeiro, is keen to know, in more detail, about the existing realities in the fisheries of other parts of the world. It Report

would also like to discuss the pros and cons of different ideas and proposals that have been brought out at the ICSF Fortaleza meeting, to analyze various aspects of the issues, and see how MONAPE can join hands with kindred organizations from different parts of the world, who face similar problems, so that they can constitute a global initiative and force.

> This interview with Jose Alberto de Lima Ribeiro was done in Fortaleza, Brazil, by Neena Koshy (icsf@icsf.net), Programme Associate, ICSF

Fun, duty or sheer hazard?

This a listing of some useful reports and documents relating to child labour (see also pgs 1 and 8), available for free download from the Internet

A Future Without Child Labour: Report of the Director General, Global Report under the Follow-up to the ILO Declaration on Fundamental Principles and Rights at Work, International Labour Conference, Geneva 2002, ISBN 92-2-112416-9(Revised Edition)

Fishing is a particularly hazardous occupation, even for adults. In the small-scale sector, which accounts for over half the world's seafood catch and millions of small fishing craft, health and safety problems are endemic for all age groups. The contribution of children is most widespread in small-scale fishing where it can be critical for the profitability of the enterprise. In El Salvador, children work in small-scale, family-based or private enterprises in which boys and girls harvest shellfish, and girls also market the product. For both sexes, this work begins well before the age of 10. Some child labour in fishing occurs outside the family traditional sector. For example, or muro-ami fishing (named after the net used) in the Philippines takes place on large vessels, and the profits are reaped by the group that monopolizes the business. Children are engaged as swimmers and divers for catching reef fishextremely dangerous work. In southern Thailand, children work as fish sorters, factory workers and as crew on fishing boats. They carry out a wide range of tasks on board, and may be away at sea for several months at a time. In central Java, work undertaken by children in fishing includes handling and repairing nets, diving, draining boats and cooking.

As in agriculture, gender issues are important in fishing. A strong connection in general between fishing and cultural perceptions of masculinity, as well as income that looks high to boys, encourages them to go to sea as early as they can. As a good deal of fishing takes

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place at night, these boys make poor daytime pupils, and high school dropout rates are a feature of fishing communities. Girls and women are engaged in marketing as well as fish processing, which can cause cuts and skin damage.

Available at: http://www.ilo.org/dyn/ declaris/DECLARATIONWEB. DOWNLOAD_ BLOB?Var_DocumentID=1568

Safety and Health in the Fishing Industry: Report for Discussion at the Tripartite Meeting on Safety and Health in the Fishing Industry, Geneva, 13-17 December 1999, International Labour Office, Geneva, 2000, ISBN 92-2-111829-0

This report has been prepared by the International Labour Office as the basis for discussions at the Tripartite Meeting on Safety and Health in the Fishing Industry. The contribution of children is most widespread in fishing throughout the world either as members of a fishing family or working for others. This report provide illustrative examples of children working as fish sorters, factory workers and fishing vessel crew in Thailand, *muro-ami* fishing swimmers in Philippines reef fishing, deep-sea pearl diving fishing and child labour in fishing on *jermals* in Indonesia, and children in the lobster fishery in United States, etc.

Available at: http://www.ilo.org/ public/english/dialogue/sector/techm eet/tmfi99/tmfir.htm

El Salvador Child Labour in Fishing: A Rapid Assessment, by Oscar Godoy, International Labour Office, Geneva, March 2002

This report contains the findings of an investigation into the worst forms of child labour in fishing. The report assesses the extent to which children are involved in this activity in El Salvador. It argues that there is an inverse relationship between the children's level of education and their involvement in fishing; that is, the higher the level of education, the lower is their participation in fishing. Fishing is carried out on the shores of lakes, bays, estuaries and gulfs located in the towns of: Tejutla, Acajutla, Puerto de la Libertad, Puerto El Triunfo, Jiquilisco and La Unión. In some areas such as bays, estuaries and rivers, crustaceans (such as crabs) are manually extracted, but only on a small scale.

Available at: http://www.ilo.org/public /english/standards/ipec/simpoc/elsal vador/ra/domestic.pdf

Freeing the Fishing Children of Ghana, by Dr. Ernest Taylor

This article looks at the situation in Volta Lake and opines that hard work under punishing conditions had robbed the children of the joy and vitality that lights the faces of healthy, happy children. Called the "placement of children", it has been a long-accepted practice in Africa. For generations, parents have placed their children for rearing in the home of a relative or a trusted friend. Most of the time, the bonds of trust in the community assured that the child would be cared for and raised decently. In the last 40 years or so, however, traffickers seeking only profits have exploited the crushing poverty of the region and corrupted this traditional practice.

Available at: http://www.ciaonet.org/ olj/gli/gli_jun2003f.pdf

Saving the Victims, One by One: An Interview by Marco Gramegna, *Global Issues*, Volume 8, Number 2, June 2003

The International Organization for Migration in partnership with local non-governmental organizations has been working for months to free these boys from forced and gruelling labour serving "slave masters" on board fishing vessels plying the waters of Lake Volta. The aim of this project is to liberate more than 1,200 boys from harsh conditions in which they receive poor nutrition, no education, and no family nurturing.

Available at: http://usinfo.state.gov/ journals/itgic/0603/ijge/gj05.htm Alu toutai-Na laki qoli: Fun or Duty: Schoolchildren's Involvement in Subsistence Fisheries in Tonga and Fiji, by Mecki Kronen, *Women in Fisheries*, Number 14, September 2004

This article focuses on certain practices in some Pacific societies (for example, Fiji), where women and men share equitable access to marine resources and fishing techniques. The results of the study indicate that, regardless of gender, children first learn about fishing from their mothers techniques or guardians. Findings indicate that participation and fishing strategies employed by children follow the patterns of their respective communities. Gender roles were found not to be imposed at an early stage, but were presumably a product of socialization within the community they live in.

Available at: http://www.spc.org.nc/ coastfish/News/WIF/WIF14/Kronen.pdf

Vulnerabilities and Visibility: Thailand's Management of Female Domestic Workers from Burma, by Sirithon Thanasombat, *Journal of Public and International Affairs*, Volume 15, Spring 2004

This article examines the difficulties of managing the migration of domestic workers from Burma to Thailand. Following farming and fishery-related sectors, domestic work employs the third-highest number of registered migrant workers in registered female migrant workers. The 2001 registration indicated that nearly a third of all female migrant workers registered in Thailand work in domestic service, followed by work in the farming and fishery-related sectors. Many industries in Thailand, including fishing, canning, garment production, rubber, fruit orchards, and domestic work, depend on high growth, but also enjoy the profits made by employing cheap, unprotected labour.

Available at: http://www.ciaonet.org/ olj/jpia/v15_2004/v15_2004m.pdf or http://www.princeton.edu/~jpia/pdf2 004/Chapter%2012.pdf

Tanzania Child Labour in the Informal Sector: A Rapid Assessment, by C. Kadonya, M. Madihi and S. Mtwana, ILO, January 2002, Geneva This report is a result of a rapid assessment study conducted in Arusha, Dar es Salaam and Mwanza regions to investigate activities performed by working children in the informal sector. Four main activities were studied. They included scavenging in Arusha municipality and the city of Dar es Salaam, quarrying in Dar es Salaam, garage work in Arusha and Mwanza, and fishing and fish processing in Mwanza. The purpose of the study was to find out the causes that push children to involve themselves in the informal sector activities, particularly in scavenging, quarrying, garage and fishing and fish processing activities. On average, children worked for nine hours per day in all informal sector activities. When broken down by activity, however, children working in garages worked for 10 hours, and children engaged in quarrying, fish processing fishing and and scavenging activities worked on average for nine hours, eight hours, and seven hours per day, respectively. This denotes that children were exposed to long hours of work, which is detrimental to their normal growth and development at such a tender age.

Available at: http://www.ilo.org/ public/english/standards/ipec/simpo c/tanzania/ra/infosec.pdf#search=%22 Tanzania%20Child%20Labour%20in%2 0the%20Informal%20Sector%3A%20A% 20Rapid%20%22

Girl Workers in the Fisheries Sector of Belawan, by R. Chairil Chaniago, *Child Workers in Asia*, vol.16, No.2, May-August, 2000

The Belawan region is a fisheries area that lies along the north Sumatra coast, and is a part of Medan, Indonesia. Most of the people living in the fishing villages are of the Malay and Banjar ethnic groups. They work as traditional fishermen with no boats of their own. Profits from the catch are divided between the fisherman and the boatowners in a system called *"taukay."* The traditional fishermen's boats commonly use single-layer nets or simple fishhooks. Their income is very low compared to the fishing ships that use modern technology.

A study of the eight fishing villages by Yayasan Pondok Rakyat Kreatif (YPRK) found that 400 children work in this sector, and 30 per cent of these child workers are girls. They work in processing shrimps, shellfish, crabs and fish. As a signatory to the ILO Worst Forms of Child Labour Convention, the Indonesian government is obliged to give attention to the all child workers, including those in the fisheries sector.

Available at: http://www.cwa.tnet.co.th /Publications/Newsletters/vol16_2/v1 6_2_chaniago.html

Plunging into the Depths of the Sea, by Alejandro W. Apit, Child Workers in Asia, Vol. 13, No. 4, Oct.-Dec. 1997

As pearl farm workers, the girl children are brought by a motorboat to the rafts that are stationed in certain parts of the sea surrounding the Ikulong Island in the Philippines. And there they are exposed to the heat of the sun or to the rain. They dive into the sea to collect shells, descending to as deep as 60 m in the water. They bring the shells to the rafts where they clean or scrub them, bore holes in them and tie a string on each so that each can be hung from the "boya" or "palutang". Then they tie each to the "boya" and plant a piece of plastic inside each shell. They work eight hours daily, but there are times when they are told to work overtime, for which they are not compensated. Their wages are already very low. They receive their monthly wages only after several days or even after a month. The hazardous part of their work is plunging into the depths of the sea for gathering and collecting shells or for retrieving fallen shells. They are provided with insufficient and unreliable safety devices. A field worker is equipped with just a pair of underwater eyeglasses and a hose that is connected to a compressor, which sends air or oxygen to the field worker under the water.

Available at: http://www.cwa.tnet.co.th /Publications/Newsletters/vol13_4/v1 3_4_apit.html

This listing has been compiled by N. Venugopalan (icsf@icsf.net) of ICSF's Documentation Centre

News Round-up

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Coastal damage

No point in boasting of a long coastline if it is getting incrementally degraded year after year. That's what **Indonesia** is discovering.

Though it has the world's second longest coastline, coastal areas are being rapidly degraded.

Environmental activists in Indonesia are calling on the government and the

public to halt the degradation of marine resources in order to prevent the kinds of disasters that have already caused suffering for millions of people.

Riza Damanik, campaign manager for marine and coastal areas at Walhi, the Indonesian Forum for the Environment, said the rapid damage to coastal areas has left 750 villages along some 81,000 sq km of the country's coastline subject to chronic erosion. "These villagers are also hit by increasingly frequent floods. In 2003 alone, some 12,000 villages were inundated, which is a sharp increase from 1999, when 7,000 villages were affected by floods," he said.

A study by Walhi showed that 90 percent of the disaster-hit villages were located in areas where coral reefs and mangrove forests were damaged.

The 2005 State of the Environment report says that of the country's 51,000 sq km of coral areas, only 5.8 per cent are well-preserved, a decrease from 2004 when 6.8 per cent were in good condition.

Meanwhile, about 57 per cent of the country's 9.2 mn ha of mangrove forests are in critical condition. Experts say mangrove trees could halt erosion and mitigate the negative impacts of large sea waves on coastal areas, where some 16 mn Indonesians live.

Ocean change

Every creature has its place and role in the oceans— even the smallest microbe, according to a new study that may lead to more accurate models of ocean change.

Scientists have long endorsed the concept of a unique biological niche for most animals and plants -a shark, for example, has a different role than a dolphin. Bacteria instead have been relegated to an also-ran world of "functional redundancy" in which few species are considered unique, said Jed Fuhrman. holder of the McCulloch-Crosby Chair in Marine Biology in the USC College of Letters, Arts and Sciences.

In The Proceedings of the National Academy of Sciences' Early Edition, Fuhrman and colleagues from USC and Columbia University show that most kinds of bacteria are not interchangeable and that each thrives

under predictable conditions and at predictable times. Conversely, the kinds and numbers of bacteria in a sample can show where and when it was taken.

The researchers took monthly bacteria samples for more than four years in the Pacific Ocean near the USC Wrigley Institute's marine laboratory on Catalina Island. They used statistical methods to correlate the bacteria counts with the Wrigley Institute's monthly measurements of water temperature, salinity, nutrient content, plant matter and other variables.

The findings have immediate relevance for scientists attempting to understand how the oceans are changing, Fuhrman said. If bacteria behave predictably, they can be used to improve models for ocean change. By including bacteria, which make up the vast majority of species on land and sea. "we have some hope of predicting how changes are going to happen," Fuhrman said.

Home again

Australia has perhaps the world's record for jailing "illegal" fishers, mostly from Indonesia.

The Australian government has since January deported more than 1,600 fishermen from Indonesia's East Nusa Tenggara province after they were charged with trespassing into Australian waters.

The fishermen were returned home on chartered planes funded by the Australian government, a provincial official was quoted by the

Antara news agency as saying.

"The fishermen were treated humanely and they even got new clothes during detention," said Fransiskus Salem, head of the office for social affairs in East Nusa Tenggara. "It is based on their own words. I even had to tell them not to illegally re-enter Australian waters to get caught and receive those facilities again," he said. Another 100 Indonesian fishermen are currently facing legal proceedings in Australia, he said.

Australian Ambassador to Indonesia Bill Farmer said earlier most of the captured fishing boats had entered Australian territories within the distance of 12 miles. In several cases, those boats landed on Australia's main island. According to the new immigration law, trespassing is punishable by

three-year imprisonment in Australia.

Oil spill

Oil spills in Nigeria have greatly polluted the creeks of the Niger Delta. The 1991 Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (revised in 2002) outlines in Part **VIIIB Sections 4 and 8** what should be done for any mystery oil spill, including in terms of compensation. The guidelines state that a spiller shall be liable for damages. If more than one person is responsible, liability should be joint.

However, activists sav that victims of pollution have been poorly compensated and several cases have dragged on for many years. The courts are located only in State capitals, putting them out of the easy reach of most rural inhabitants. The litigation process is fraught with many technicalities, requiring the services of legal practitioners that most people cannot afford.

The other problem in the Niger Delta is due

to river sand mining, which destroys the aquatic habitat and disrupts the ecosystems of the river channels. **Fishing communities** suffer as a resulton top of the destruction caused by the oil industry. Fishing has become less productive and profitable in many areas of the Delta, with reduced catches and lower incomes, compared to income from oil-related activities. Many swamps, rivers and creeks where fish spawn have been destroyed or polluted. The efforts of local fishermen to maintain or improve upon their income levels result in overfishing, say environmentalists.

Typhoon victims

Typhoon Saomai killed at least 134 Chinese and left over 163 missing, according to the official Chinese State media. Reports have emerged of fishing villages crushed by the strongest storm to make landfall in China for half a century. An unknown number of fishermen were at sea when Saomai arrived in southeast China's Fujian province, leaving anxious families with no news of their loved ones.

One local resident described how he walked along the coastline in the north of the province, near the fishing town of Shacheng, trying to identify the body of his wife's uncle.He said he came across several bodies that had drifted ashore but not the one he was looking for.

"The bodies had become so bloated in the hot weather that they were impossible to recognize," he told AFP by telephone, asking not to be named. "We could only tell people apart from the clothes they were wearing." The Southern Metropolitan Daily reported from Shacheng that many fishing vessels had disappeared, with families desperate to know what happened to their sons, husbands and brothers. Saomai caused Shacheng to lose a staggering 1,000 fishing boats, while half its 8,000 families were made homeless when the storm flattened their houses.

Fuding also saw horrific damage, reporting 41 killed, 107 missing and 1,350 people injured as hundreds of houses collapsed, according to Xinhua. The city's Ziguo Temple, a priceless relic of Buddhist architecture more than 1,000 years old, was also severely damaged, Xinhua said.

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Empty cadences of sea-water licking its own wounds, sulking along the mouths of the delta, boiling upon those deserted beaches—empty, forever empty under the gulls; white scribble on the grey, munched by clouds. If there are ever sails here they die before the land shadows them. Wreckage washed up on the pediments of islands, the last crust, eroded by the weather, stuck in the blue maw of watergone!

— from *Justine* by Lawrence Durrell



ICSF is an international NGO working on issues that concern fishworkers the world over. It is in status with the Economic and Social Council of the un and is on ILO'S Special List of Non-Governmental International Organizations. It also has Liaison Status with FAO. Registered in Geneva, ICSF has offices in Chennai, India and Brussels, Belgium. As a global network of community organizers, teachers, technicians, re-searchers and scientists, ICSF'S activities encompass monitoring and research, exchange and training, campaigns and action, as well as communications.samudra Report invites contributions and responses. Correspondence should be addressed to the Chennai office.

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

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