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REPORT

INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS



South Africa's New Fisheries Policy

MARINE STEWARDSHIP COUNCIL

Looking at ITOs

SEA LIONS IN PERU'S WATERS

FISHERIES IN FAROE ISLANDS

AQUACULTURE IN EL SALVADOR

CEARÁ FISHERMEN OF BRAZIL

PROBLEMS IN LAKE VICTORIA

News Round-up

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Comment

Is the White Paper black enough?

The much-awaited White Paper on South African fisheries (excerpted on page 41 of this issue of SAMUDRA), in the making for over two and a half years, and released on 19 June, was expected to mainly address the anomalies in the country's fisheries, especially the distribution of marine resources, which is highly skewed in favour of whites. At the outset, the White Paper seeks to ensure inter-generational equity and long-term sustainability, and pledges to act as the custodian of all marine resources, which will be treated as a national heritage. Unlike in the past, the rights to utilize living marine resources will also be allocated in a fair and equitable manner. The new policy is seen as contributing to the long-term vision embodied in the Macro Economic Strategy of the country's Department of Finance, namely, the creation of a competitive, fast-growing economy that generates enough jobs, and redistributes income and opportunities in favour of the poor.

The White Paper acknowledges the concentration of access rights in the hands of a few whites. It considers this a testimony to unequal opportunities and sees in it a strong argument for the future broadening of participation. The White Paper seeks to dismantle the existing system of permits and quotas. It proposes that access rights be converted into "real rights", which could be purchased through a transparent and competitive process, against the payment of an appropriate fee based on quota, catch or effort.

The new policy moots short-term leasing of rights to those who are not keen on acquiring permanent rights. But it is not clear who would really benefit. It seems that both blacks and whites could profit. The whites, however, stand to gain more, since they have well-entrenched interests in the industry and have the financial muscle to successfully participate in the lease market.

From the point of view of the Macro Economic Strategy, however, no attempt has been made to discuss if the existing fishing capacity could be restructured to provide more employment. It only states that subcontracting under fair conditions could be considered to benefit both the "big" and the "small". The competitive process envisaged for transferring the Total Allowable Catch rights could perhaps frustrate the original objective of fair and equitable distribution of rights. It will prevent economically vulnerable groups from getting a foothold in the industry and could hinder the redistribution of income and opportunities to the poor. This process will only benefit the rich blacks.

Further, the suggestion to reduce the number of fishers will only affect the disadvantaged blacks and coloureds. The White Paper also makes the fundamental mistake of confusing fishers with fishing capacities. Fishing capacity can be reduced without displacing labour if technology is judiciously selected. What is needed is a phased redistribution of fishing capacities through an appropriate combination of capital and labour in the choice of fishing technologies, along with the "unbundling" of access rights to benefit the black community.

In addition to quota, catch and effort, granting territorial use rights in fisheries should also be considered, especially in the case of species like rock lobster and abalone. Such rights could be given exclusively to the artisanal fishers (or subsistence fishers, as they are called in the White Paper), who depend on the coastal resources for their livelihood. Given their relatively smaller number, it should be possible to grant such permanent rights to legitimate claimants to the coastal resources. Granting them long-term rights, subject to better conservation and management measures, could go a long way in improving living standards as well as the law and order situation in the coastal areas.

In any case, from the point of view of restructuring access regimes, there is no guarantee that the blacks will be automatically empowered, even if the so-called real long-term rights are transferred to them. Given the scope for a lease market for such rights, control can still be exercised by the whites in different forms, thus defeating the original purpose of restructuring fishing rights. What is urgently required is a system that can not be misused, in devious new forms, to perpetrate the existing inequitable power relations in fisheries. The system should be more responsive to the structural dimensions of black poverty and the lack of economic opportunities for blacks.

Straddling the colour barrier

Policymakers in post-apartheid South Africa have the unenviable task of resolving conflicting interests in fisheries

The government of South Africa, led by Nelson Mandela, is currently considering a major restructuring of its fisheries policy to ensure greater participation of the non-white communities in the marine capture fisheries. A White Paper on the fisheries policy of the post-apartheid government has just been prepared.

To understand this process in the backdrop of major issues in marine fisheries, to follow-up on ICSF contacts and to co-operate with fishworker initiatives in South Africa, I visited several important fishing centres in Western Cape and Eastern Cape, the provinces that account for almost the entire marine fish production of South Africa. The trip provided opportunities to meet with established trade unions in fisheries; local, regional and national associations of fishers that are not affiliated to unions; managers of big business groups, and lawyers. There were also meetings with the Fisheries Desk of the African National Congress (ANC), parliamentarians, policymakers and members of the judiciary and press.

With a seaboard of 3,000 km, South Africa produces about 580,000 tonnes of fish in liveweight (valued at US\$400 million). Fisheries contribute to nearly half a per cent of the Gross Domestic Product. The access to resources is distributed mainly through a combination of quotas (for fish such as hake, abalone, rock lobsters, anchovies and pilchard) and permits (for tuna and squid). The sector employs about 30,000 fishworkers (around 20,000 fishers and about 10,000 processing workers).

The Directorate of Sea Fisheries, the department responsible for fisheries matters, has been shunted from ministry to ministry. Originally under the Ministry of Economic Affairs, it was later shifted to

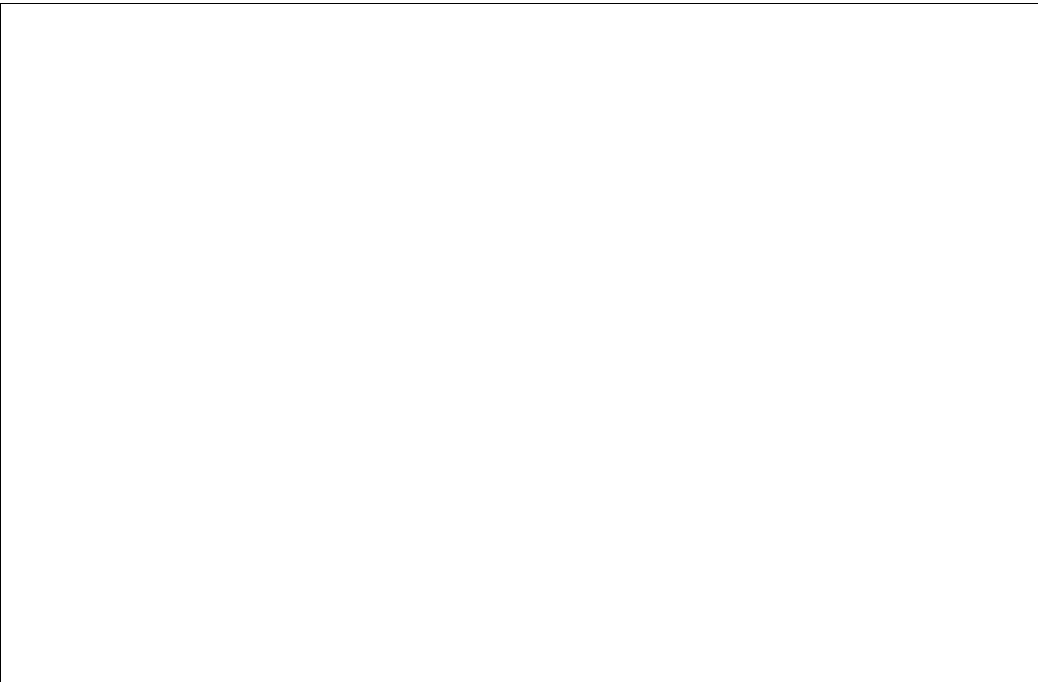
the Ministries of Industries and Agriculture. Since 1983, it has been under the Ministry of Environmental Affairs. Until 1990, access rights and fishing licences were given by the Directorate of Sea Fisheries. The Quota Board was formed in 1990 and, since then, it has been awarding quotas on the advice of the Sea Fisheries Advisory Committee. The allocation of non-quota species is still made by the Department of Sea Fisheries.

There are 25 deep-sea hake quota holders, of which 13 are for trawling. The biggest eleven belong to the South Africa Deep-sea Trawling Association. They caught about 165,000 tonnes of fish in 1995. Three companies control over 78 per cent of the deep-sea hake quotas of South Africa. There are about 56 vessels with a combined tonnage of 43,500 GRT valued at US\$80 million, which is the largest investment in the fisheries of South Africa.

About 80 per cent of fresh and frozen fish consumed in South Africa comes from this sector, which reports annual sales worth US\$160 million, including about US\$50 million from exports. It is the largest foreign exchange earner in fisheries. (Some of the world's finest hake products come from South Africa and a substantial proportion consists of products with a high local value added component.)

Code of conduct

Around 2,000 fishers are employed in the deep-sea sector and another 6,000 in permanent or non-seasonal work. The workers in this sector subscribe to a code of conduct. In addition to remuneration, they are entitled to fishing commissions, bonuses and company contributions to employee benefit schemes. In the inshore—defined as waters below 110 in depth contour—there were 11 quota holders in 1995. They belong to the



Southeast Coast Fishing Association and function in multi-species fisheries. They also hold quotas for hake and aguilhas sole, and catch about 15,000 tonnes.

The inshore trawling sector uses vessels 14 m to 32 m in length. There are now about 34 vessels in operation (down from 54 in 1982). The sector provides employment for 300 fishers and 800 land-based workers. The workers are entitled to pension, provident fund, housing assistance and freedom of association, and they are affiliated to several unions. The majority of workers come from the South East Cape region.

The quota system for pelagic stocks was introduced in South Africa in 1974. The quotas were given to factories and not to private boatowners. Large companies control the pelagic fishery, from production to retail trade. More than half the Total Allowable Catch (TAC) for pelagics is apparently controlled by six companies (the TAC for pilchard is 23,000 tonnes and for anchovies, 256,000 tonnes). Tuna is also harvested, with a TAC of about 3,000 tonnes.

There are about 73 purse-seiners in South Africa. Apart from a small proportion of pilchard canned for human consumption, and some used as bait, most of the landings are processed into fish oil (sold to the food products

industry) and fishmeal (sold locally to poultry farms). The pelagic fisheries generate employment for over 1,000 workers at sea and about 4,000 workers on land. The tuna industry employs about 2,600 fishers.

Jigging for squid (called ‘white gold’), the most recent fishing industry in South Africa, began in 1986. It is based on permits issued on the basis of annual performance. There are about 278 vessels, of which 112 are between 10-20 m and 19 between 20-30 m in length. The fishery is worth US\$15 million. It employs about 4,000 people at sea and 1,000 ashore.

Line-fishing comprises several sectors, ranging from full-time commercial operators to recreational fishers. While it provides seasonal and occasional employment to about 19,000 fishers, it is also a source of recreation for hundreds and is the key support to marine-related tourism. The species fished include snoek, kob, yellowtail, hottentot and carpenter. The commercial operators sell these fish to hawkers on the quay. There are about 2,364 hand-line boats. Of these, about 1,000 are less than 6 m and four are over 50 m in length.

Abalone fishery

The abalone fishery is a shallow-water one, where TAC quotas have been issued to six companies for 615 tonnes. There is also an extensive recreational fishery

associated with abalone. It employs 58 boats and about 200 fishers. Rock lobsters are found at depths less than 80 m isobath. Traps and hoop nets are used in this fishery, which has a TAC for 2,000 tonnes. There is also a South Coast rock lobster harvested at depths of 100 m to 200 m isobath.

This fishery has a TAC of 452 tonnes. In the peak season, it employs 218 boats of lengths ranging from 6-40 m, and around 5,000 fishers. Most of the informal fishermen of South Africa (about 5,000) make a living by illegally catching rock lobster.

Fishermen's Community Trusts (FCTs) were established in 1992 to uplift and develop the fishing communities along the west coast. A certain proportion of the deep-sea hake TAC was set aside for allocation to FCTs. In 1995, about five per cent of the hake TAC and four per cent of the anchovies TAC were set aside for FCTs. Since the harvesting of hake requires highly technical and expensive equipment which the FCTs do not have and can ill afford, they are unable to participate in the harvesting, processing and marketing of quotas. Their quotas are, therefore, sold to established fishing companies.

An 1830 painting, *Fishmongers*, by HC de Meillon in the Cape Town Museum shows vendors carrying fish on wooden poles across their shoulders, as can be seen in Southeast Asia. This suggests a local food fishery in South Africa in the 19th century, perhaps with the participation of the original slaves from Indonesia. Commercialization of the South African fishing industry, however, was initiated at the turn of the century by Messrs Irvin and Johnson, two British nationals, who set up a vertically integrated firm for the export of deep-sea hake.

Unlike in the rest of Africa, Asia or Latin America, South Africa has the rare distinction of having developed an industrial fishery much before the growth of an artisanal or small-scale fishery. Almost the entire catch comes from industrial trawling and purse-seining. Mainly controlled by white companies, these have a highly skewed ownership pattern. For instance, in hake, the most

important fisheries in South Africa, three white companies controlled 72 per cent of the TAC in 1996. Irvin & Johnson Ltd., set up by the pioneers, continues to be one of those three companies.

There are about eight large firms that control the fisheries of South Africa. These also have business interests in food products like potato chips, canned tomatoes and olives. Some of them are also involved in diamond and gold mining. These companies are essentially subsidiaries of big South African multinationals and are controlled by a handful of families.

The non-white groups participated in the coastal fishery in a rudimentary capacity for the local market, in addition to working on board white-owned fishing vessels and processing plants. A small-scale fishery, very limited in scope and mainly for the local market, thus co-existed with an industrial fishery for the export market.

This situation changed to some extent in the 1970s, when a quota system was introduced in South African fisheries. The access enjoyed by the non-whites to lobster fisheries was then suddenly taken away by the apartheid regime and given to the white companies. This forced many people from the coastal communities to fish illegally for rock lobster and supply clandestinely to the black market at cheaper prices. The right to fish non-quota species like snoek, however, is still open to all, both non-whites and whites.

With the demise of apartheid, there have been new entrants into the quota-managed fishing industry from the coloured, black and Indian communities. In 1995, for example, about five per cent of the TAC for hake and four per cent for anchovies were set aside for the non-white communities. The quotas were insufficient to undertake viable investments and were nick-named 'paper quotas' since, in most instances, they were sold to the white companies.

New fisheries policy

Unlike the Sea Fishery Act of 1988 that focused on conservation of the marine ecosystem and orderly utilization of living marine resources, the new fisheries policy

of post-apartheid South Africa advocates the utilization of such marine resources is undertaken on a long-term, sustainable basis, with optimum social and economic benefits to the people. There is a great deal of discussion and debate on what ought to be the new policy in relation to equity.

While the big companies and rich labour unions of non-whites are unanimously for the continuation of the existing system, coloureds, blacks and Indians are divided on what ought to be the focus of the new policy. These groups are essentially three:

the Informal Fishing Community, an association of fishers from the unorganized artisanal sector, that makes a living by illegally fishing for rock lobster and abalone in the nearshore waters; the Food and Allied Workers Union (FAWU), the biggest union of food workers which also represents industrial fishworkers, including women; and

the cluster that includes interest groups like the Fisheries Development Unit, the Port Elizabeth Fishing Forum and several other regional and local associations of coastal communities encompassing a variety of interests, ranging from wage workers to quota and licence holders.

The various perspectives on allocation of fisheries resources in the post-apartheid

era can be classified into four categories. This classification, however, does not imply that there is no overlap between these categories.

In what can be labelled the 'restructuralist' school, there is first the FAWU that demands restructuring of all sectors of fisheries, including production, processing and marketing for all commercially valuable fish, from a holistic perspective, through a transparent and participatory process.

It wants this to be done without losing existing employment opportunities and also by taking into consideration the Reconstruction and Development Programme (RDP) of the Republic of South Africa. It also wants to 'address the wrongs of the past', which include the discriminatory practices of the apartheid regime, such as the exclusion of informal fishers from fishing activities.

Black elites

This group is against redistribution of quotas by the Quota Board to the 'black elites', fearing that such acts will only exacerbate the problem of restructuring the industry. Also, it thinks that giving unviable quotas would only result in the new quota holders selling tern to big companies. It regards the Quota Board's distribution of quotas to non-whites as a rent a black' policy and considers it an initiative that misses the wood for the



trees. FAWU also insists that attempts at restructuring should also apply to the 'newcomers', meaning non-white quota holders.

Mandla Gxanyana, General Secretary of FAWU and facilitator of the Fisheries Policy Development Committee (FDPC) constituted by Dr. Dawie de Villiers, Minister of Environmental Affairs and Tourism, in late 1994, for developing a new fisheries policy for South Africa, feels that both processing workers and fishers should benefit from restructuring. He wants the problems of fishing communities (including both harvesters and processors) to be addressed.

He thinks a non-quota system that will empower the harvesting workers without affecting the chain of workers in processing and marketing may be desirable. He does not want people without any history in fisheries to get quotas. He thinks area-based and national associations should have a larger stake in capture fisheries. He would prefer some demarcation of fishing grounds: those earmarked for deep-sea fisheries and those set aside for bona fide fishermen from the coastal communities.

The interests of those who are marginalized, the bona fide fishermen, have to be looked after. The policy should be to enrich neither a few blacks nor a few whites. The current way of reforming fisheries, unfortunately, does not address the basic problem, says Gxanyana.

The 'abolitionist' school is made up of non-white groups, mainly the Informal Fishing Community, who are fighting to abolish the existing system of quota allocation. Their main concern is unconditional access to coastal fisheries for rock lobster and abalone. They fear that any redistribution of the TAC, short of levelling the playing field and abolishing the current access regimes, would not do justice to their concerns. The demands of the Informal Fishing Community are also supported by FAWU.

In its *Submission to the* FDPC on Access Rights, the Informal Fishing Community argues basically for a *laissez-faire* approach to fisheries, except in the case of abalone.

It believes in the fairness of the market system and does not want any government intervention in fisheries, except for conservation and monitoring of catch (to make sure that landings do not exceed the TAC). It considers current estimates as politically motivated and would like objective assessments of stocks that could act as the basis for deciding the TAC. It believes that access to fisheries resources should be governed only through a fee based on the size of the fishing vessel, in the context of abalone fishery, however, it proposes greater control and something like a territorial use rights regime.

The third group is the 'redistributionist' school comprising other non-white groups who demand greater redistribution to non-white fishing communities of the quotas enjoyed by white companies. They are interested in viable quotas (meaning quotas that would enable them to economically invest in fishing capacity) for important fisheries like hake, anchovies, abalone and rock lobster. This group seems to be mainly represented by the Fisheries Development Unit in the Western Cape and Port Elizabeth Fishing Forum in the Eastern Cape region.

There is also another perspective within this group, especially among some in the Eastern Cape, who feel that non-white quota holders should share their quotas with poor fishers from the same communities. They see the attitude of the majority of new quota holders, who refuse to share the newly acquired quotas with their poor non-white neighbours, as similar to the behaviour of white companies under the apartheid regime.

The mosaic of new claimants to fishery resources from within the non-white fishing communities include:

- fishermen with quotas but who have no fishing capacity;
- fishermen who have both quotas and fishing capacity;
- fishermen from the informal sector, not legally recognized as fishermen;

<div>South Africa</div>	<ul style="list-style-type: none"> retired fishermen from fishing companies; fishermen made redundant by fishing companies; widows of fishermen; and women processing workers. 	<p>between FAWU and these unions is that whereas FAWU tries to take on board the interests of unorganized fishers, the latter support only their own self-interest.</p>
	<p>In addition, there are several interest groups outside the fisheries sector which would like to partake of the quota system.</p> <p>According to the redistributionists, putting an end to the quota system, as demanded by the abolitionists and restructuringists, would only lead to open-access regimes and depletion of commercially valuable fish stocks. The Fisheries Development Unit thinks that controlling access through a quota system is a necessary prerequisite to ensure the sustainability of the resource. While wanting to retain the quota system, they are for the abolition of the Quota Board, which is seen as a relic of the apartheid past. In its place, they want a Namibian system of quota management, where the bulk of the quotas are believed to have been given to non-whites.</p> <p>In a memorandum dated 14 May 1996 to the Minister Designate, Pallo Jordan, the Informal Fishing Community contends that allowing access to those currently excluded from fisheries will ultimately benefit only the big companies. This is because no attempt is made to redress the fundamental imbalance arising from the concentration of harvesting and processing capacity in the hands of a few. Given the technical capability of the white companies, and the lack of it among non-white communities, any situation of open access may understandably benefit the old players more than new entrants.</p> <p>Finally, in the <i>status quo</i> school are those companies which wish to maintain the <i>status quo</i>. They are supported mostly by unionized fishermen, including coloureds and blacks, who fear that any restructuring would negatively affect their current earnings from fishing operations like trawling and long-lining. They are called 'sweetheart unions', a derogatory term for unions that are close to big business. The main difference</p>	<p>The redistributionists have dismissed the new Marine Fisheries Policy of South Africa as a <i>status quo</i> policy since it does not propose to change the highly skewed ownership pattern in fisheries and since it makes no mention of redistributing quotas currently enjoyed by the white companies to non-whites.</p> <p>There is thus a divide between the non-whites in the organized sector who support the <i>status quo</i> and the non-whites who demand change. There are further differences among those who demand a change, often based on altered perspectives. These affect the unity of the non-whites and also add new complications to the present situation.</p> <p>Not convinced</p> <p>Some of the labour, especially those who do not have any complaints against the existing conditions of work and remuneration in the industrial fisheries, are yet to feel convinced that their rights will be protected and their earnings maintained if there is a radical change in the system. In one instance, on 13 May 1996, there was a physical clash between two sections in Cape Town, with one side shouting, "You want to take our jobs</p> <div></div>

away!", and the other shouting back, "You are pawns of the big companies!"

The apprehensions of the organized labour force are also perhaps based on the fact that very few of the non-white claimants to the quotas have their own capacity to fish. They are also yet to learn the ropes of fish processing and marketing.

Also adding to the confusion is the minority of migrant blacks from tribal homelands who work as wage labourers in the seasonal squid fishery of Eastern Cape. They are perhaps the poorest and are far removed from the debate on fisheries restructuring or redistribution of quotas. Their main demand is for greater diversification of fishing operations and for round-the-year employment.

The positions of the Informal Fishing Community and that of FAWU seem to converge at several points. Both seem to be against the quota system and share the concern that the redistributed quotas are basically falling into the wrong hands. They also seem to agree upon a demarcation of fishing grounds between coastal and deep-sea fisheries. Both demand that only bona fide fishers among the new claimants should be allowed to participate in fisheries.

The inference that could perhaps be drawn is that activities not labour-intensive at the stage of harvesting or processing (like harvesting and processing of abalone and rock lobster) could be reallocated to bona fide fishers in the informal sector. Other activities which are more labour-intensive should, by and large, remain as they are.

In other words, the message seems to be that the biggest union of fishers and processing workers, while willing to uphold the livelihood rights of non-white coastal communities who are dependent on fisheries, is not keen to support the business aspirations of the non-whites, except those of the workers themselves.

The reluctance of formal unions to support the redistributionists might arise from the present position of organized labour in South Africa. The condition of work and remuneration of South African

fishworkers is fairly good in big companies. These workers might fear that hard-earned benefits would get dissipated in any transition from the known present to an unknown future.

Clearly, there is need to have a set of criteria for allocation of resources and an enabling legislation to implement it. While it is easy to identify the distinct capital and labour interests among those who favour the *status quo*, it is, however, too early to differentiate the interests of those who favour change.

It is also too early to say who among the non-white communities will largely benefit if the government changes the norms for quota allocation. The 'haves' on both sides of the colour barrier seem to be mobilizing the numerous 'have-nots' to fight for their respective interests. There is, however, tremendous distrust and questioning of motives.

Difficult situation

In such a difficult situation, the policymakers' role is rather unenviably delicate. There has to be greater clarity on who among the interested parties could best serve the goals of long-term sustainable utilization of marine resources and livelihood interests of coastal communities. 3

This report was written by Sebastian Mathew, Executive Secretary, ICSF, after a trip around South Africa from 7 to 14 March 1997.

Marine Stewardship Council

Who's being seduced?

As the Marine Stewardship Council tries to sell itself in the South, critics are starting to question its market orientation

The Marine Stewardship Council (MSC) is trying to tackle an issue of global concern: the sustainable use of fishery resources for the benefit of current and future generations. As part of the process of setting up the MSC, 'Principles and Criteria' are being established and developed for sustainable fishing. These will eventually provide the logic for a certifying scheme that will be used to qualify (or disqualify) fisheries products for the MSC ecolabel. This aspect of the MSC has the potential to make a valuable contribution to the whole sustainability debate, and is to be welcomed.

The process of consultation being undertaken by the MSC project in devising and developing its Principles and Criteria is being conducted in an extremely open and transparent manner. The project is seeking to consult with, and be guided by, the views of as many stakeholders in the fisheries sector as possible. This is also a very positive aspect of the project and is proving to be highly successful in stimulating debate.

However, of considerable concern to many people is that the MSC is based on a Northern-driven neoliberal agenda. According to Carl-Christian Schmidt the recently appointed Project Manager of the MSC, "Ecolabelling is a neoliberal tool and the MSC is going down that path." From a neoliberal market perspective, livelihoods and cultural traditions are no different from consumer durables like cars, and, as such, can be valued and traded. In the neoliberal marketplace, selling your fish quota (and your livelihood from fishing). is no different from selling your car.

Yet, it is likely that it will be the trading interests, like supermarket chains and

retail outlets, which will support the MSC, and determine whether or not fish with MSC ecolabels become popular consumer items. In the UK, supermarkets account for around 60 per cent of fresh fish and 80 per cent of frozen fish sales. These stores, conscious of their public image and their market shares, will be the ones to welcome the MSC ecolabelling scheme, not consumers themselves.

The MSC's interest in the South would seem to be mainly as a source of fish products which could be accredited. Fish sporting the MSC label will only be marketed in the North. It is unlikely that they will be sold in the South.

On 5 May, Schmidt, Julia Novy, the consultant recently appointed to help the MSC devise its strategy for the South, and several key people from WWF and Unilever hosted a 'Less Developed Countries Workshop' in London. The agenda included three key questions: Who are the relevant stakeholders? What are the key issues facing the introduction of the MSC in developing countries? What should be the strategy and action plan for the MSC in developing countries?

Of the 12 participants, six were WWF, Unilever and MSC staffers. Except for a participant from Papua New Guinea, the rest were from a variety of UK NGOs and consultancy firms with interests in the South. Laura Cooper of the WWF'S Endangered Seas Campaign explained that, as far as the South is concerned, the application of the MSC to developing countries was being put off until after the core programme was established.

Lots of questions

"We know we don't know how to do it right (in the South), we know we need to ask a lot of questions", she said, adding



that the workshop and subsequent consultations were designed “to put them in touch with the people who they need to be in touch with.”

Schmidt clarified that the MSC would be limited to taking a “slice of the fisheries sector.” The MSC might set right some, but not all, wrongs. “We are living in a second-best world and have to apply second-best solutions,” he said.

MSC accreditation will require participants to buy into the certification scheme by paying for accreditation and subsequent monitoring. Smaller fleets of large ships able to offer bulk supplies will have an advantage over larger fleets of small vessels whose supplies may fluctuate.

Small-scale, decentralized, community-based fisheries, prevalent in the South, might be discriminated against, because they would not be able to buy into the MSC certification scheme. It could also prove too costly for MSC certifying agents to accredit the many small-scale, decentralized fisheries. The MSC may thus favour more centralized, company-owned fishing operations.

As the process of developing the MSC Principles and Criteria advances, boundaries will need to be drawn around what the MSC includes and what it excludes. This may mean that environmental and technical factors will

be the main determining criteria for accreditation, while social factors may be pushed into the background.

Although the MSC deals with inter-generational, not allocation, issues, fisheries where allocation issues are resolved through privatization (for example, through management systems based on individual transferable quotas) will be easier to certify. It will also be easier for the MSC to certify fisheries on scientific evidence, than on more socially based traditional knowledge systems.

In the fisheries of developing countries, traditional community-based resource allocation systems and socially based management systems are widespread but not widely recognized or acknowledged. With its scientific and technical bias, will the MSC discriminate against these?

The question of exporting a Northern agenda to the South is also a major issue for many people, who see the MSC as Northern neocolonialism in another guise. There are many in the South who do not share the North-devised neoliberal agenda on which the MSC is based, and who would, therefore oppose its imposition. There are also many who feel that the North should rather be questioning and regulating its own patterns of consumption, rather than let consumerism drive its citizens’ lives.

More work left

Clearly, there is a lot of work to be done before the MSC will be fully up and running. According to Schmidt, it should be completely independent and functional by end 1998. Given this tight deadline and its inherent partiality, how serious can the MSC initiative be as a tool to encourage long-term sustainability, as opposed to being just another short-term marketing gimmick?

This report has been sent by Brian O’Riordan of Intermediate Technology, Rugby, UK

Marine Stewardship Council

Don't be harsh on the MSC

Both fishing communities and consumers have much to gain from the recent MSC initiative, says a former fisher

As a former fisher, I disagree with the conclusion drawn by Barbara Neis in her article "Cut Adrift" (SAMUDRA, November 1996), which analyzes the potential impacts of the Marine Stewardship Council (MSC) initiative. Although Neis points out many of the possible benefits of the MSC, she concludes that this initiative, designed to harness market forces to promote sustainable fishing, disenfranchises women and is "the equivalent of a death sentence for (sic) fisheries and communities that depend upon them."


The basic fallacy in Neis's prediction of the MSC's impacts is the assumption that fisheries are static and that any programme designed to have an impact on fisheries must address all current inequities associated with fisheries. The state of fisheries worldwide is not static. Global fish catches have increased 500 per cent in the last 40 years. Fishing communities, such as those on the Atlantic coast of Canada and America, are already in jeopardy or have collapsed, as have some fish stocks. The social costs of mismanagement are severe; overfishing ruins communities and wrecks the lives of women, men and children.

Fisheries are complex and multi-dimensional, encompassing biological, environmental, social and economic factors, and scientific uncertainty. The MSC, in developing criteria to evaluate the sustainability of fisheries, is taking these factors into account. The mission of the MSC is to work for sustainable marine fisheries by promoting responsible, environmentally appropriate, socially beneficial and economically viable fishing practices. However, the MSC is not a panacea for our worldwide fisheries crisis. It is designed

to provide consumers with a more direct way of promoting sustainability in fisheries through market forces, so that women, men and children may rely on healthy supplies of fish in the future. It is not designed to replace existing democratic institutions, which should be encouraged to promote sustainability, and, for that matter, social equality.

As an individual who has fished for a living, I am intimately aware of the shortcomings of modern fisheries management and applaud a programme designed to promote sustainable fishing practices for the benefit of the resource and those who depend upon it.

Consumer point of view

As a consumer, I support a mechanism allowing consumers to have a more direct impact on fisheries management through the market place. I encourage all of those in fishing communities, women and men alike, who have so much to lose from overfishing and mismanagement, and so much to gain from conservation and sustainability, to support the Marine Stewardship Council. 

This response to the debate on the MSC Initiative carried by SAMUDRA comes from Laura Cooper, an ex-fisher from Alaska, us, who is now the International Programme Officer of WWF's Endangered Seas Campaign.

Are ITQs really a panacea?

Controlling who fishes what, where, when and how might be culturally and ecologically more sensible than quota allocations

“Natural resources must be developed and preserved for the benefit of the many and not merely for the profit of a few.”

—The Fight for Conservation by Gifford Pinchot

Someone should carve Gifford Pinchot’s words of 1910 in stone and place them outside DG XIV (the Fisheries Commission of the European Union, EU) in Brussels and at the door of the European Parliament.

While Pinchot was writing specifically about the US. Forest Service at the beginning of this century, his words could be justifiably applied to the world’s marine fisheries today.

In 2002, there will be a review of the Common Fisheries Policy of the EU. The extent of this review and its legal standing is currently being much debated. Some believe that all aspects are up for re-consideration, while others think that irrevocable decisions were stitched into the Treaty of Corfu for instance, the introduction of Community Fishing Permits after 2002. The most that can be hoped for are decisions on the Shetland Box and the 12-mile limit to free access.

It is doubtful whether the EC intends to radically change its management systems. Rather, the indications are that it merely intends to ‘fine-tune’ current systems of quota allocations by the introduction of a market mechanism. This article advocates a rethink on such a strategy.

Aided by clichés that abound in the mass media, we, in Europe, appear to be in great danger of being swept along by an uncritical tide of belief that the salvation of fish stocks rests in allocating individual fishers, tradable quotas or Individual Transferable Quotas (ITQs).

When Garret Hardin, a genetic biologist, wrote a paper on birth control and titled it *The Tragedy of the Commons*, academics subsequently overlooked its potential contribution to fisheries management, that is, Hardin’s recognition of human problems as not calling for mere technical solutions, and his analysis of how to ensure that people curb their perceived freedom in order that the greater number might be freer.

The mass media, instead, was caught up in the catchy title of Hardin’s paper, though its analysis had been clearly and fully explained 14 years earlier by Scott Gordon in *The Economic Theory of a Common Property Resource: the Fishery*. It is difficult to ascertain whether it was the mass media’s frequent use of the phrase which dulled the academics’ critical capacities to better evaluate Hardin’s paper or whether the overused title offered administrators and politicians alike an understanding of not only the problem but also a solution, an understanding which enabled and encouraged them to more readily engage with the academics.

Once the problem and solution could be understood in simple terms, resources in the form of research funds were more willingly directed at addressing the fisheries conundrum.

Interpretation challenged

In more recent times, an increasing number of people are challenging Hardin’s interpretation of the commons as applied to fisheries, i.e. the belief that common property resources are by nature open-access and will inevitably lead to tragedy. Indeed, there are those who believe that very few, if any, truly open-access fisheries exist in the world. It is argued that most societies have their own, often unspoken, rules which vary

clearly dictate who can fish what, where, when and how.

As J. Cordell says in *A Sea of Small Boats*, “There aren’t many places where an outsider can just walk into town and start fishing, hauling nets, setting traps and so on. Anyone doubting the validity of this principle has only to try it out.”

However, the move to more centralized management systems, coupled with technological advances have, in certain instances, broken down implicit control systems and, in themselves, have contributed to the creation of greater open-access fisheries.

In uncritically swimming along with the ‘Tragedy of the Commons’ tide, subtle community regimes and controls were ignored. They were not even recognized or understood and were replaced by centralized controls which had little understanding of ‘what’ (fishing) and ‘who’ (fishers) they were attempting to control. This lack of understanding meant that regulations imposed from above were perceived in the fishing communities as having little or no legitimacy and, accordingly, required complex and expensive enforcement arrangements which were of questionable efficiency and effectiveness.

The uncritical acceptance of trite clichés should make us much more wary. Alarming, though, a wave similar to the ‘Tragedy of the Commons’ type appears to be gaining strength around the world—that ITQs are the salvation of the fish stocks because they will:

- generate a more economically efficient fishing industry;
- rationalize production without intervention from public funds;
- create the conditions for sustainable commercial fisheries;
- ensure a more easily manageable sector; and
- result in lower enforcement costs.

Currently, there are too few academic voices being publicly raised against ITQs. The analysis of the problem and its solution seem foolproof, which is the only way it will appear if one is desk-bound and views the sector in a career time span, as opposed to the everyday catch-to-market reality of the fishing community.

There are fishery managers who view ITQ as a means of engineering changes which will make fisheries easier to manage and at minimum cost to public funds; a fishery with fewer ownership units and geographically more centralized in larger ports. These developments greatly simplify the task of administrators. Such simple solutions, however, pay little heed to the ultimate shape of a fishing industry so fashioned and the resultant effects on stock and people.

It is also very difficult for biological scientists, who have been prevalent in fisheries management for long, to concede that their science is too imprecise to enable a numerical approach, such as quotas, to be successful. A dangerous assumption underlying ITQs is that TACs (total allowable catches) are proven mechanisms and that ITQs attempt the fine-tuning of a basically sound concept.

It is possible that the numerical systems’ objective is not conservation, as claimed, but rather, to serve multinational firms which need to work in certainties to provide for the increasingly lucrative international market in quality fish products. Quotas and ITQs create a certain, predictable environment in which firms can plan their purchasing, pricing and product development.

Traditional techniques

In the past 25 years there has been increasing interest in traditional fishing management techniques and much has been written about TURF (Territorial Use Rights in Fisheries) and CMT (Customary Marine Tenure) systems. More recently, attention has focused on community management and co-management regimes, prompted by the perceived failures of modern fisheries management systems. These represent attempts at understanding, more fully, the nature of the fisheries and how, in the past, users

and use of the resource have been managed.

Some people ask: why spend so much energy on stipulating what numerically should or may be extracted when we will never know, with any degree of certainty, what is there in the first place? Not just what is there, but also what processes other than fishing are taking their share of the catch. If these facts can not be ascertained with any degree of certainty, why are we encouraging a supposedly precise system to tackle a very imprecise, complex and possibly chaotic situation?

Such questions suggest that there are possible lessons to be learnt from past fisher communities who concentrated their efforts on maintaining an equilibrium in the marine environment rather than on the numbers to be extracted. It is possible that controlling who fishes what, where, when and how might prove to be more culturally and ecologically sound. A recent draft report on the Common Fisheries Policy after 2002, by the Fisheries Committee of the European Parliament, calls for member state TACs to be assigned to individual fishermen and for measures to “guarantee the proper operation of the market in fishing rights.” The apparent purpose of this proposal (a Motion for a Resolution) is to break away from the system of national quotas which is perceived as

running counter to the introduction of a single market in the fisheries sector. Its intention is to allocate quotas to individual fishermen and to then encourage trade in quotas, thus leaving the market to dictate the restructuring of the fishing fleet. This shows just how strongly the tide of belief in TACs and ITQs has swept over us.

A 1996 paper by E. Eithorsson on the impact of ITQs in Iceland, *Coastal Communities and fish Management: the Case of Icelandic Fisheries*, should serve as a warning on the implications of this numerical system of fisheries management. In particular, the creation of a trade in the system needs to be much more thoroughly and openly debated, before the EU’S Parliament gives its approval to the Motion for a Resolution.

Recent Icelandic experience reveals that from 1984, when ITQs were introduced, until the end of 1993, the fleet has actually increased by nine per cent gross registered tonnage (GRT) and by 17 per cent horsepower. Trawlers over 500 GRT have doubled in aggregate tonnage and small coastal vessels have increased by 57 per cent in tonnage.

Increased share

The large companies, which held 25.5 per cent of ITQs in 1991, increased their share to 47.2 per cent by 1994. There has been a very clear geographical centralization of

Europe	
	<div> <div> <p>the industry and a marginalization of the small fishing communities.</p> <p>According to the study, “Along with a loss of local control over units of production and a decline of the land-based processing industry, people in these communities are losing their future rights to harvest the fish resources. The fishermen-owned inshore fleet with owned quota is shrinking and, due to quota shortage, many inshore vessels are now dependent on quota leasing arrangements with the larger companies.”</p> <p>In effect, the landowner becomes a tenant. The fisherman who yesterday sold his large vessel to an expanding company now has to lease quota from the company in order to operate his small inshore vessel. Ethorsson foresees the present trend resulting in the majority of Icelandic ITQs being owned by multinational companies and ponders what the national benefit from such efficiency might be.</p> <p>In <i>Reply: Chaos and Parametric Management</i>, J. A. Wilson, James Acheson and Peter Kleban recently asked the following questions:</p> <ul style="list-style-type: none"> Should rules restraining fishing be designed to emphasize the maintenance of a balance between harvesting and spawning or </div> <div> <p>should they emphasize the maintenance of system structure?</p> <ul style="list-style-type: none"> Should our scientific agenda emphasize population assessments, as is presently done, or should it emphasize the investigation and monitoring of ecosystem structure and state? Should the governance of fisheries continue to emphasize top-down centralized control or is there a need to decentralize and democratize the process? <p>Merits and demerits</p> <p>In the context of EU and many other fisheries, greater debate is urgently required on the merits and demerits of the current numerical system of fisheries management—whom does it well serve, and whom does it ill serve? Such a debate is required before, rather than after, any further fine-tuning. Perhaps Pinchot’s words of 1910 might be the best guide for such a debate.</p> </div> </div> <div> <p>This article is by Joan McGinley, a fisheries researcher and campaigner, based in Ireland</p> </div>

The roar of the sea lion

When nature conservation efforts grow irrational, the results can be disastrous, as shown by the case of the sea lions off Peru

According to FAO, there are 116 species of marine mammals in the world. Of these, 60 are found in the South East Pacific (Ecuador, Chile, Peru). It is commonly recognized here that the pinnipeda compete with fish for resources. The pinnipeda in Peru comprise the southern fur seal (*Arctocephalus australis*) and the southern sea lion (*Otaria byronia*). The latter, because of their great numbers, pose a huge problem for the artisanal fisheries.

In Peru, this is a particularly significant problem and, since 1970, when the Ministry of Fisheries was created, it has received greater government attention. Yet, 27 years after the creation of the Ministry, only three multisectoral official commissions have been constituted to tackle the problems created for fishermen by the sea lion.

Since 1991, Peru's artisanal fishworkers have been represented by the Federation for the Integration and Unification of the Artisanal Fishworkers of Peru (FIUPAP). The Federation is very actively involved in developing and promoting the artisanal sector. It has a representative in the seven-member official commission (with the National Director of Artisanal Fishery as chairman) constituted to determine "actions to diminish the interference of the southern sea lion in the artisanal fishery."

According to the census by FIUPAP and IMARPE (Instituto del Mar del Peru) in 1995-96, there are 6,258 artisanal fishing vessels, of which 2,500 have an average capacity of 2.5 gross registered tonnage (GRT), using drift-nets to fish for species like Peruvian silverside, eastern Pacific bonito, lorna drum, cabinza grunt and palm ruff. Peru's artisanal sector includes vessels up to 30 GRT.

The total population of Peru's artisanal fishworkers, including those in the coastal and continental areas, is 45,000. Of this, 40 per cent fish without vessels,

A comparison of the figures for the number of artisanal fishing craft and southern sea lions justifies the call to regulate the growth of the southern sea lion population through a rational cull.

Year	Artisanal Vessels	Sea Lions
1971	4,700	30,054
1981	5,171	49,185
1990	5,960	103,562
1997	6,258	195,000

IMARPE recommended the harvest of 2,800 and 4,500 sea lions in 1984 and 1992 respectively, based on the principles of a Plan of Global Action for Marine Mammals developed between 1978 and 1983. During a meeting of experts in Costa Rica in 1995, the Peruvian delegation, represented by IMARPE, recommended legislation for a programme to control the population of southern sea lions and also to curtail their interaction with the fisheries through means that do not negatively affect their population.

Environmental groups

However, these recommendations have not been applied in Peru, mainly due to pressures exerted by national environmental groups which resist any action to control the population of southern sea lions. Worse, these groups do not furnish alternative solutions for this problem.

Granted that these days the trade-environment nexus is an important and controversial subject internationally. Yet, in the application of unilateral

Peru

measures under the pretext of environmental protection, there seem to be forces working against the commercial interests of Peru. The access of its artisanal fishery products to the markets of developed countries would be affected.

The southern sea lion does not figure in international conservation agreements because its survival is not in danger. On the other hand, the negative economic impact on the incomes of the fishworkers and communities of Peru is not taken into account, nor is the significant contribution of artisanal fishery to global nutrition security.

A preliminary study by FIUPAP has estimated the annual damage caused by the southern sea lion to the artisanal fleet at US\$64 million. FIUPAP is now evaluating the economic impact on other techniques of fishing, so as to assess the larger economic consequences.

Although Peru's artisanal fishery receives support from FONDEPES (National Fund for Fisheries Development), there is very little investment in credit programmes for equipment, vessels or diversification of the fishery. In 1995 and 1996, these investments amounted to only US\$3 million and US\$6 million respectively.

Considering that fishing is the second most important economic activity after mining, the negative impact of the sea lions on the incomes of Peruvian fishermen is considerable. Artisanal fishworkers are those principally concerned with maintaining an adequate ecological equilibrium in marine areas. The survival of these communities depends on the availability of marine resources. While we recognize the rights of marine mammals to live in the sea, we must not forget to maintain some sort of equilibrium.

In Peru, however, no such equilibrium is sight. The situation appears set for a struggle for survival, in which the greatest damage would be precisely to the environment. In such a scenario, the blame should not be hurled at artisanal fishworkers but at the mercenaries of the conservation movement, who misunderstand the relationship between conservation and development.

This article written by Manuel Milla, an artisanal fisherman from FIUPAP (Federation de Integracion y Unificion de los Pescadores Artesanales del Peru), has been translated by Luz Pisua of Instituto Huayuna, Lima, Peru

Faroeese fishermen

Skilled fishers, bungling economy

The work of Foraya Fiskimannafelag, the association of Faroese fishermen, highlights the problems facing the Islands' fisheries

The very first ships from the Faroe Islands sailed to fish in East Iceland in 1872. That was when the Faroese marine fishery began. By the 1930s, the fishery had evolved to such an extent that most of the males in the Faroe Islands were aboard ships in the waters surrounding Iceland from spring to fall, the season for marine fishing. The ships were very primitive, for a very long time not better equipped than Noah's Arc.

They had hardly any safety equipment and often capsized, losing all the hands on board. The crew invariably came from the same village as the skipper and there were, therefore, many family members working on a ship. Consequently, when a ship went down, the loss of lives meant immense tragedy for the entire village.

Faroese fishermen also began to fish near Greenland in 1925. For many years, the fisheries near Iceland and Greenland were the main source of fish for the Faroe Islands. In addition, fishing commenced in Canadian waters and in the Barents Sea as well as in Norwegian and Russian waters.

Later on, the North Sea gained importance as a ground for Faroese fishermen. In the early days the fishermen used a hand-line to catch cod from depths of up to 300 m. Each person was paid according to the number of fish caught.

Until 1970, most of the Faroese catch came from distant waters. The fishery near the Faroe Islands was limited to seasonal line fishing (longline and hand-line) from smaller fishing vessels.

These vessels supplied fish to the very modest fillet industry which existed then. The larger fishing vessels fished in Icelandic, Greenlandic and Canadian

waters during summer. During winter, they fished in Faroese waters and landed their iced catches in British harbours.

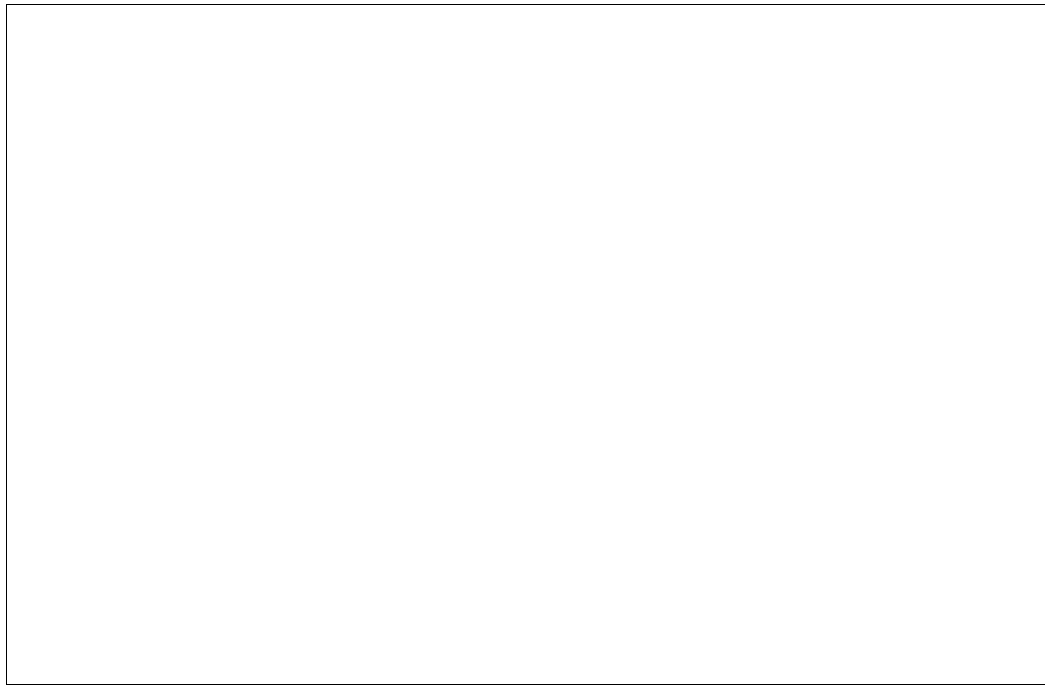
At the same time, a large fleet of foreign trawlers, especially British ones, fished in Faroese waters. The foreign fleet had its golden period of expansion in the 1950s. But, at the start of the 1960s, restrictions on Faroese distant-water fishery began to take effect. The introduction of quotas made Faroese shipowners shift attention to local grounds, emboldened by the experience of Aberdonian fishermen who came to fish near the Faroe Islands, even though they had to sail all the way back to Aberdeen to land the catch.

For a start, two trawlers identical to the ones belonging to the Aberdonians, were ordered by Faroese fishermen. These trawlers had limited success. It turned out that the Faroese, who had been very skilful at fishing in the waters of other countries, were inexperienced when it came to their own fishery.

In fact, when trawling intensified, it became necessary to hire old Scottish skippers to train their Faroese counterparts. The Faroese fishermen soon became as skilful as the Scottish. The greater capacity to catch fish was due to the growth of the Faroese trawler fleet. This, of course, raises the issue of whether trawlers have a long-term harmful effect on fish stocks, compared to more passive techniques like longline and hand-line fishing.

Exclusive zones

Exclusive economic zones (EEZs) of 200 miles were introduced everywhere in the North Atlantic on 1 January 1977. The fishing industry had to necessarily adapt. Fishing vessels cut down on crew size. Instead of processing the fish on board,



which called for a large crew, the catch now had to be landed for processing at the fillet factory ashore. Where previously the crew size was 25 men, a typical crew now consisted of only nine.

The surplus fishermen began working in fillet factories. They could return home every evening, instead of being away from their families for months on end. In record time, about 20 fillet factories sprouted all over the Faroe Islands and the trawler fleet swelled to 80.

If the Faroe Islands is compared to, for instance, Iceland or North Norway, they appear as a mere little speck on the map, as are the waters surrounding them. In comparison, Iceland and North Norway are whole continents surrounded by vast oceans. The scanty natural resources of the Faroe Islands partly explain the crisis which they faced in the early 1990s.

That the Islands' natural resources are more meagre than those of Norway or Iceland is evident from a comparison of the groundfish species. Icelandic and Norwegian fisheries abound in cod.

The situation is quite different in the Faroe Islands. Normally, it is saithe which is caught in large quantities, while cod ranks second. Cod and haddock represent only a third of the catch of groundfish near the Faroe Islands. These are expensive species

which command stable prices in global markets. Saithe, however, fetches a lower price and must compete with cheaper species from other parts of the world, like pollack from Alaska and saithe from the South Atlantic.

The example of cod illustrates how difficult it can be for a community to depend entirely on fishery. Statistics show that, on average, 30,000 tonnes of cod were caught yearly near the Faroe Islands until the 1980s.

However, at the start of the 1990s, the catch gradually started to decline and dwindled to 6,000 tonnes by 1993. Haddock suffered the same fate too.

This decline in catch of the Islands' most valuable fish was a catastrophe for the Faroese community. The effect of lowered incomes of fishermen, shipowners, fillet factories and their employees quickly spread to the rest of the community.

The crisis in the cod and haddock fishery especially hit the traditional inshore fishery of smaller fishing vessels using longlines. For this group of fishermen, it was indeed a catastrophe.

Serious situation

How serious the situation was can be gauged by the fact that the International Council for the Exploration of the Seas (ICES) advised a complete closure, of the

cod fishery in Faroese waters. This closure actually came about automatically, since there were simply no cod left to be caught.

The official explanation for the disappearance of cod was that, A from the beginning; stocks had been so greatly overfished that it was doubtful whether the species were able to reproduce at all.

This crisis in the cod fishery showed how difficult it is, in fact, to predict the size of fish stocks. In 1994, the Faroese fishermen's catch of cod began to increase considerably. This went against the biologists' recommendation of a slow increase, as cod stocks would only be rebuilt gradually. Additionally, the biologists had, as late as 1993, dashed the fishermen's hope of a return of the cod in the same quantities as in the Fast.

Unfortunately for the biologists, the increase in cod catches continued. This actually created problems for the fishermen because their limited by-catch quotas for cod were fished long before the other quotas were used up. As a result, fishing vessels lay idle, since it was almost impossible to fish without high cod by-catches.

The fishermen also found that it was not just limited areas that had more cod than were 'supposed' to exist. Cod were

everywhere in the Faroese waters, a fact also confirmed through tests conducted by the Faroese Fishery Research Centre. The growth of the cod fishery gradually became so pronounced that the Faroese government and biologists recommended a Canadian biologist be engaged for an independent estimation. The Canadian biologist concluded that considerably larger quantities of cod existed than had been estimated by the Faroese biologists. The quota for cod in the summer of 1995 was set at 10,000 tonnes, as recommended by ICES. The quota was subsequently mooted to range between 15,000 and 17,000 tonnes. However, after political interference, the final quota was set at 18,500 tonnes.

In this context, it is worth mentioning that the conservation committee, consisting of representatives of active fishermen, had recommended a quota of 19,000 tonnes. This recommendation was initially rejected as pure nonsense by the very people who considered themselves knowledgeable in these matters. Revealingly enough, the Canadian biologist's estimate of Faroese fish stocks was considerably closer to that of the fishing industry itself, rather than that to which ICES had lent its name.

Large quantities

In fact, there had never been as much cod in Faroese waters as in recent years. The trawlers were the first to catch



unexpectedly large quantities. Then, the longline fishing vessels, contrary to wide experience, caught record amounts of cod in the midst of summer. The Faroese fishing boats which used hand-lines also had record catches. From initially recommending no catch at all in 1993, ICES soon recommended a catch of 24,000 tonnes, closer to the long-term average cod catch of 30,000 tonnes per year.

The biologists now admit that what happened to the cod is a mystery. The cod, which is now caught in huge quantities, is of a size that did not exist earlier, contrary to the Faroese biologists' claims. The cod must have migrated to other waters, only to return to Faroese waters, although no one knows where they migrated to. However, there is undoubtedly a correlation between the disappearance of food in the sea near the Faroe Islands and the disappearance of the cod. Significantly enough, when the food returned, so did the cod.

The fishermen's experience with saithe, which was the opposite, leads to the same conclusion. In 1996, the saithe catch was significantly less than predicted. According to biologists, the relatively good years for saithe have now disappeared. This raises doubts on whether there is a correlation between large amounts of cod and small amounts of saithe. The experience of fishermen shows that very seldom do both saithe and cod exist in plenty at the same time.

Aided by a parasite-induced decline in the export prices of Faroese fish products, trade collapsed in the 1990s, affecting banks too. It became necessary to borrow money from Denmark to prevent banks going bankrupt. These loans had severe conditions, including a quota system introduced in 1994. One condition for a quota system to work properly was the availability of reliable fish stock estimates.

The quotas for cod and haddock were set on the basis of their stocks being in a terrible condition. The quota for saithe was set considering the fact that saithe stocks were in a reasonably good state. Accordingly, pair trawlers, which comprise the largest group of big fishing vessels, were allocated a large quota of saithe, but a small quota of cod and

haddock. If the fishery had evolved as it did the previous year, it would not have been difficult to stay within the limits of the quotas, since there was no cod then in the waters near the Faroese Islands.

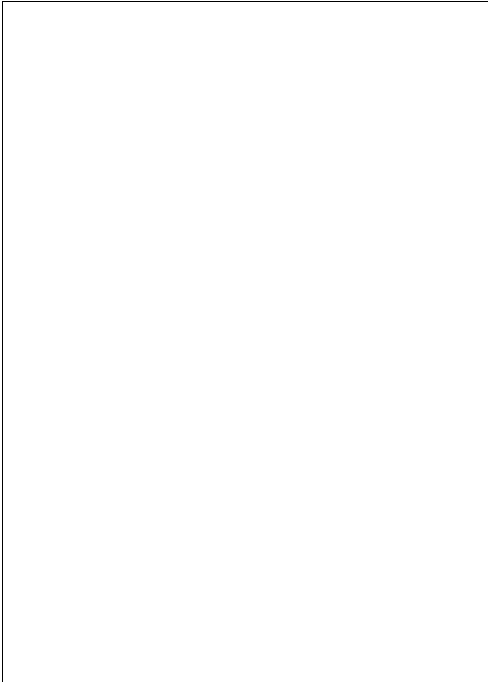
However, since it is almost impossible to reliably estimate the size of fish stocks, the quota system was absolutely impossible to manage. The cod by-catches increased in size, proportionate to the main catch of saithe. Quite inevitably, the cod by-catches were fished before the main catch of saithe. Such a quota system will inevitably lead to 'creativity' among the fishermen. Cod will be thrown overboard so that the landed quantities are finally equivalent to the actual quota. Otherwise, cod will be 'renamed', to be registered as another species of fish to which no quota applies.

The fishing industry soon complained that it could no longer accept the present system where the quotas allocated had no relation to the size of the respective fish stocks. At the request of the fishing industry, the government appointed a committee to find a solution to these problems. There was a lot of scepticism as to whether a committee composed of fishery authorities and fishery biologists could come to an agreement at all. Contrary to expectations, the committee arrived at an agreement. In 1996, it proposed to replace the present quota system with a regulating system to be based on (i) area closures to rebuild fish stocks, and other technical regulations; and (ii) the number of days vessels can spend at sea fishing.

In those areas where cod were found, area closures were instituted either permanently or for part of the year. In some instances, the whole fishery was closed. In others, only trawling was prohibited. The committee felt that these conservation measures would prevent overfishing of stocks. In addition, a limit to fishing days was introduced for each fishing vessel. The regulatory system took effect from 1 June 1996. It is too early to tell whether this new system will satisfy the demands made on it.

Planned economy

The Faroese fishing industry has still not recovered from the crisis. Nevertheless,



there has been considerable progress. Until 1989, a subsidy scheme existed and prices were fixed.

This system, part of a planned economy, contributed to the economic collapse. It has since been replaced by a totally free market system, based on the suggestions of the fishermen's association. The open-market system led to a considerable increase in the value of different species of fish. Now, an increasingly large part of Faroese groundfish is sold in auctions, partly controlled by the fishermen's association.

As a 'solution' to the economic crisis, creditors forced the Faroese community to consolidate most fillet factories into one single company. Afterwards, some of these factories began to purchase fish, while others were rented out for different purposes and still others were closed. Most Faroese resisted this consolidation. They were right to be resentful since this model proved to be an ultimate failure.

It is of utmost importance that the Faroe Islands develop other industrial activities to supplement fishing. Politically, there has been such an effort, but it is a slow process, though proceeding in the right direction.

It was in reaction to the formation of the shipowners' association that Faroya

Fiskimannafelag (FF), the association of fishermen, was founded in 1911. The next year FF succeeded in reaching a collective agreement with the shipowners, the first such agreement in the Faroese labour market.

FF's aim is to work for fishermen's interests. In the first few years, FF concentrated its energies on improving the collective agreement with the shipowners. There were quite a few disputes in that period and in 1934 the feelings among the members ran so high that FF got divided. However, it was reunited in 1957.

The activities of FF have increasingly broadened in scope. Much of its work involves representing fishermen before public authorities, for instance, in committees which decide the fishermen's interests. However, the Faroese authorities felt that FF was exerting too much influence through its representation in these committees. Consequently, the most important committees were disbanded.

FF has also worked actively with international trade unions. Since the 1960s, it has been a member of the International Transport Workers' Federation (ITF), which has approximately four million members in around 100 countries. ITF is divided into eight sections, one of which deals with fishing.

As chairman of the fishing section since 1980, I have had ample opportunities to represent the Faroese fishermen's interests internationally and have a fair inkling of their problems. Faroese fishermen are paid according to the collective agreement between FF and the shipowners' association. Unlike most other workers, fishermen are paid a share of the value of production or the value of the catch.

A typical collective agreement provides the fishermen with a share of 27 per cent of the catch value, which is divided equally among the crew.

Other benefits

The fishermen also receive vacation pay, 12 per cent of one share. The shipowners also pay a bonus to the officers.

Needless to add, such a wage system can create huge variations in the fishermen's incomes. Consequently, it has become necessary to provide the fishermen with guaranteed incomes, paid through public or government funds.

The fishermen started to get such incomes in 1950. This has gradually been raised over the years, thanks to the persistent efforts of FF. Presently, the wage system works in such away that the fishermen are guaranteed a minimum wage equal to the daily wage of an unskilled worker who works eight hours a day, or a fifth of a 40-hour week. Many believe that the guaranteed income is unreasonably high and there have been many political attempts to get it reduced.

Nevertheless, FF has resisted such changes and ensured that the fishermen's incomes remain intact. FF also sees possibilities in Faroese fishermen exploiting more species of fish. For years it was believed that there were no fishing opportunities in Faroese waters, other than conventional angling and trawling for traditional species, such as cod, haddock, saithe and red fish.

Once, a Spanish fishing vessel caught for illegal fishing in Faroese territory turned out to contain, to everybody's surprise, quantities of monkfish caught with nets. Nobody in the Faroe Islands had thought that kind of fishery possible. The illegal Spanish catch motivated the Faroese fishermen to harvest monkfish in a similar fashion, and they were successful. As a secondary effect, other fishing vessels have started fishing Greenland halibut with nets, also successfully. After the traditional financial institutions refused to loan money, the fishermen's association itself helped the fishermen to purchase the necessary equipment for this kind of fishing. Among the other species of fish in Faroese waters which are not fully exploited is the blue whiting, a very cheap fish found in plenty in these waters.

It also appears that more fishing opportunities exist in international waters, along the Mid-Atlantic Ridge which stretches from south of Iceland/Greenland to the Azores. Research has shown that it is possible to fish different kinds of new and exotic

species which can fetch good prices. Experimental fishing with longlines has succeeded in these waters. Since Faroese fishermen are very experienced with longlines, they are best equipped to explore these new opportunities. However, the special ground conditions in these waters necessitate intensive research before the fishing industry can make profits. The Faroese authorities have a huge task in exploring these new Opportunities.

Based on a SWOT (strengths-weaknesses opportunities-threats) analysis, it can be said that the biggest strength of the Faroe Islands is the existence of a very skilled workforce of fishermen. The best proof of this is the demand for Faroese fishermen to work on board fishing vessels in a number of foreign countries. It is easier for Faroese fishermen to get a job on, say, a Norwegian vessel than in the Faroe Islands. Another strength of the workforce is that it is very flexible and boundaries between trades are totally unknown. The Faroese accept any work which is offered. Fishermen, for instance, do not mind working on board foreign fishing vessels. Faroese artisans, as another example, seek employment in Germany.

Overdependence

The biggest weakness of the Faroe Islands is its overdependence on fishery, including aquaculture. Another weakness has been the unstable political situation in the Faroe Islands. However, it is politically agreed that the fishing industry must be stable. But the geographical situation of the Islands is a drawback. The Faroe Islands must establish closer relations with Europe as quickly as possible. Politically, there is agreement on the need for such close ties.

This article is written by Oli Jacobsen who became a fisherman when he was 14 years old and is today the chairman of Foroya Fiskimannafelag, the Faroese Fishermen's Association

Aquaculture

Too great a cost

The costs of aquaculture may far outweigh the benefits, as a cost-benefit analysis done in El Salvador suggests

In the developing world, aquaculture is a growth industry. The cultivation of shrimp and fish in tanks or excavated ponds yields high returns and earns much-needed foreign exchange. However, it is the location of these tanks and ponds that critically determines whether this is a sustainable activity, whether fragile environments are degraded or maintained and whether the net returns are the result of profit-maximizing or mere cost-shifting.

These are not rarefied questions of interest only to those pisciculturists who care about fish cultivation or to the bankers and economists who are concerned about exports and growth. Rather, it is a question of sustainability, of community rights and, ultimately, of environmental justice.

Consider the case of El Salvador, where, as in many other parts of the developing world, a substantial portion of the remaining mangroves is under threat from conversion to aquaculture. On the one hand, this represents an opportunity to generate income, to produce shrimp for export and to capitalize on the current First World penchant for this tasty delicacy.

On the other hand, the development of aquaculture contributes to the irreversible loss of a rich and diverse ecosystem that is vital to offshore and estuarine fisheries, an ecosystem that secures a collection of subsistence and industrial activities and one that hosts a multitude of irreplaceable fauna and flora. This dilemma is at the center of the development conundrum: What are the trade-offs between growth and equity? How much environmental wealth must be sacrificed to increase GDP? Who benefits and who loses?

Mangroves comprise a rich, humid ecosystem which is diverse in fauna and flora. Marine and estuarine fauna, such as crab, mussels, shellfish, shrimp and fish, are essential to coastline communities, providing them not only a source of income but also a valuable source of protein. Mangroves also provide timber and fuelwood as well as a host of other non-timber products and environmental services. Mangrove wood commands a high market value, being easily worked to make furniture and for construction purposes. For many coastal populations, it is also an important source of fuel and charcoal.

Mangroves provide security for wild and plant life, on which coastal and interior populations depend as a source of protein, skins, nuts and medicines. Mangroves also provide environmental functions, such as barrier protection, drainage and filtration, stabilizing the coastline and surrounding agricultural lands and furnishing them with natural windbreaks, fresh water and conduits.

Approximately 112,000 Salvadoran families depend directly on the 26,700 hectares of mangrove and brackish forests for their living. The conversion of mangroves to aquaculture ponds displaces the livelihoods of these families and denies them traditional access to the environmental goods and services that the mangroves provide.

Mangrove conversion

In addition, the conversion of mangroves for aquaculture threatens other groups whose economic interests are intimately connected to the existence of the mangroves. The mangroves secure the breeding grounds for industrial shrimp fishing, an activity which contributes to approximately 40 per cent of all

agricultural export revenues. The export of shrimp alone generated approximately 231 million colons or US\$27 million for El Salvador in 1993.

A little over 4,000 hectares, or almost 16 per cent, of the total remaining area of mangrove forest in El Salvador was estimated to be prime land for aquaculture. Many private investors eagerly await the opportunity to purchase land, obtain permits to clear up the mangroves, and construct ponds and tanks for shrimp cultivation.

While there are several analyses of the profits generated by such an activity, the conflicts over access rights and the true environmental costs of conversion have not been fully explored. This calls for not a mere calculation of costs and benefits, but an examination of the value society places on the environment. It is important to consider how the costs and benefits are distributed: asking who wins and who loses highlights the concentration of power and the exercise of choice.

Nominally, state legislation protects all mangrove and brackish forests. These ecosystems are state property, managed by the Forestry and Fauna Service (FFS), and subject to administration by the Director General of Natural Resources (DGNR) in the Ministry of Agriculture. The FFS has the power to authorize, control and regulate the access to, and use of, all forest

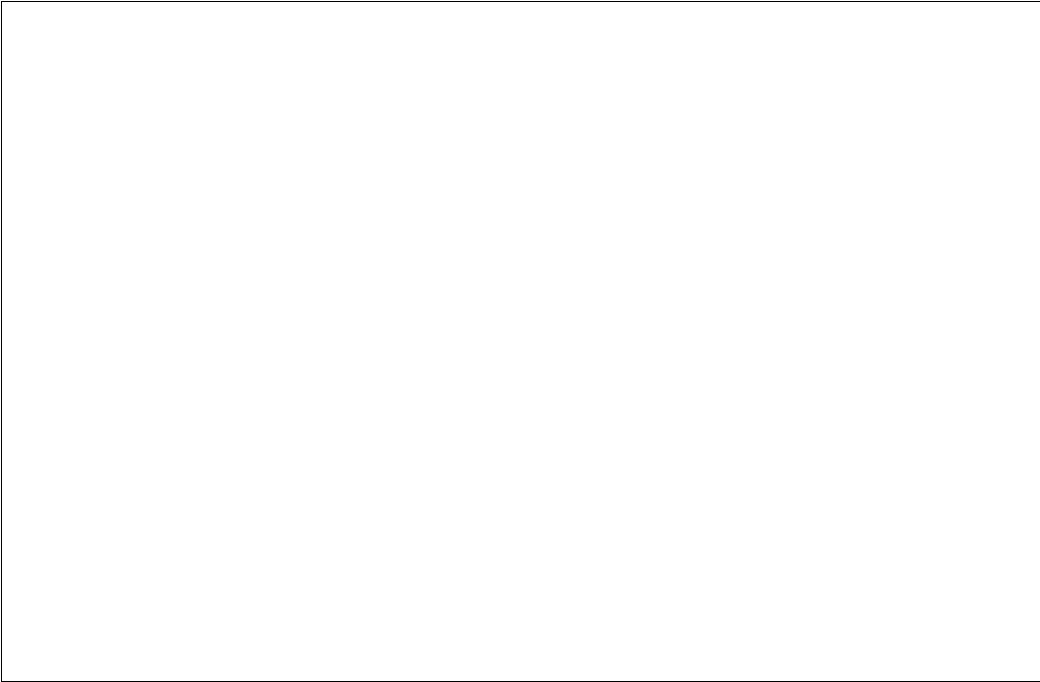
products, both timber and non-timber. The FFS is responsible for the rational management of the mangrove systems, the allocation of access rights and the overview and implementation of reforestation efforts.

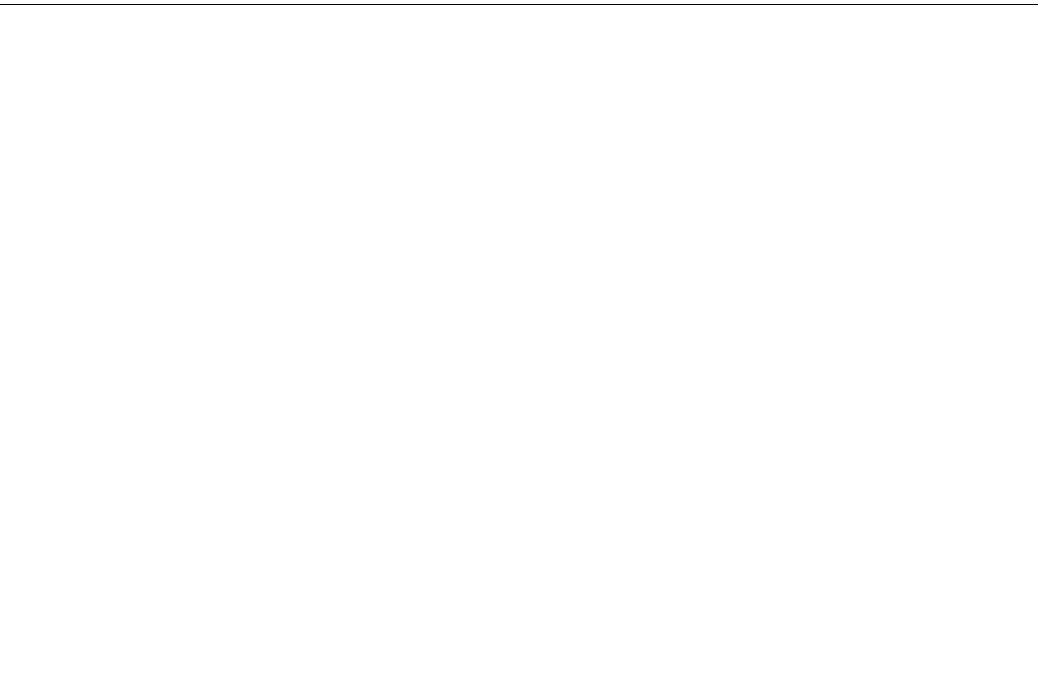
Despite this, however, the DGNR has little authority to enforce regulations and is significantly under-resourced, as it has been subject to substantial downsizing under structural adjustment agreements to reduce the size and cost of government.

Before May 1992, petitions for rights to use forest land to convert to agriculture, salt or shrimp ponds were made to the FFS in the Ministry of Agriculture. This agency would review the claims, and, if approved, estimate the number of trees to be cut down, apply a stumpage fee, and levy a state tax accordingly. In a similar fashion, usufruct rights to state-owned land were also granted by the FFS, and stumpage fees levied if land use entailed the destruction or loss of tree cover.

Stumpage fee

The stumpage fee paid to the state was 25 centavos (less than US\$0.05 in 1992) for each mangrove tree felled. In May 1992, this rose to 2.5 colones (US\$0.29) per tree. The stumpage fee was unrelated to the replacement cost of reforestation or to the environmental damage suffered as the result of deforestation. It also remained too low to provide an effective





disincentive for illegal felling or encroachment.

Many aquaculture investors and timber merchants went ahead and cleared land before seeking permits to do so. Due to staff and budget constraints, the stumpage fee scheme was generally self-reporting, requiring those who had committed such an infraction to declare the extent of the mangroves cleared after the event. Occasionally, the Forestry Service was able to verify the amount of mangroves cleared, but, in general, the stumpage fees levied were not subject to effective monitoring or enforcement.

In response to extensive mangrove deforestation, a logging ban was introduced in May 1992 that forbade further clearance and forest conversion. The ban extends to all uses including fuelwood, construction and commercial trade. Licences to convert tracts of forest to agriculture, shrimp ponds or salt flats have been temporarily suspended.

However, the logging and clearance ban applies only to trees which are still being serviced by the tides. If it is possible to establish that the tides no longer service an area of mangrove, an application can be made to remove the remaining mangrove trees. There is no preclusion for the strategic construction of barriers that may temporarily starve existing

mangroves of tidal waters and enable the applicant to qualify for land conversion rights.

In part because of the inability to enforce existing legislation, and in part because of initiatives to expand aquaculture and promote investment in export-oriented activities, mangrove conversion continues. It is often assumed that the most profitable decisions are taken and El Salvador can only benefit from the conversion of mangroves for aquaculture. While planners and policymakers like to believe that rational decisions are made about the allocation and use of all goods and services, reality tends to belie that assumption,

Ask an artisanal fisher in El Salvador whether the benefits from the conversion of mangrove forests to aquaculture ponds outweigh the costs, and the reply would probably be, “Most certainly not.” A similar reply would most likely come from fishers elsewhere in the world. But ask an aquaculturist and he would probably reply that it depends acutely on how the ponds are managed and the intensity of the activity. Ask an investor in aquaculture and he would most likely reply that he neither knows nor cares.

Bottom lines

This is because investors are concerned about their bottom lines—the profits that they reap—and as long as they do not bear

the costs of environmental degradation, and are not forced to compensate those who have lost livelihoods, and as long as their profits are not compromised, they have no reason to be concerned.

To answer the question of whether benefits outweigh costs, a group of economists, socio-biologists and artisanal fishers decided to calculate the costs and benefits from aquaculture. We chose a site in western El Salvador in the Department of La Unión in the Gulf of Fonseca.

The idea was simple- We would calculate the value of the forest assuming that it is deforested at current rates, and the value of all the benefits that it would secure if it were to remain the same size and not converted. We would compare these values with those in which all the land potentially available for conversion to aquaculture was excavated to form shrimp ponds.

These three different scenarios were labelled: the current management strategy; the partial conversion strategy; and the sustainable management strategy. We would account for all the costs and benefits, the loss of fuelwood and timber, the loss of fish in the estuaries and at sea, and compare these to the benefits generated by selling a high value-added product which earns foreign exchange.

The approach we chose synthesized qualitative and quantitative methods, using rapid rural and participatory appraisal techniques and survey instruments to gather information.

We constructed a household survey to develop estimates of the demand for timber and fuelwood and the use of other forest products such as herbs, spices, mammals and crustacea. We undertook a fishing survey to estimate the returns from marine and estuarine fishing activities,

These data were added to Ministry of Agriculture's data on industrial and artisanal fisheries. We surveyed shrimp, farms and collected data on yields, shrimp larvae production, costs of operation and profits. We gathered data on the price of fuelwood and timber. All this information was combined to develop a measure of the value of the mangroves over time, taking

account of their different growth and regeneration rates.

The data was used to estimate the importance of mangroves for marine fisheries. Since mangroves provide the breeding grounds for many marine and estuarine fish, the total production of fish is intimately related to the extent and density of the mangrove areas.

Using multiple regression techniques, we demonstrated that the size of the artisanal and industrial catch was a function of the total extension of mangroves. This allowed us to monetize the fisheries production that the mangroves supported.

A group of local community members, fishers, NGOs and forestry service employees helped design the hypothetical sustainable management option. A harvesting scheme was developed that would enable fuelwood and timber to be harvested by the local community. A compensation scheme was devised to incorporate local fuelwood traders into the management of the mangroves to ensure that illegal deforestation did not continue.

Each household was expected to purchase an improved fuelwood or propane gas stove using a soft loan facility operated by the management committee and financed from income collected by the Ministry of Agriculture for industrial drag-net trawling violations.

Since costs and benefits occur over time, they must be discounted to reflect a single value that has meaning at one point in time. A dollar today is not the same as one dollar tomorrow. Therefore, all figures were discounted by the real rate of interest on long-term government bonds, 7.08 per cent, so as to express them in terms of current values.

Costs and benefits

After all costs and benefits were accounted for, both for the conversion option and for the sustainable management option, we were able to compare the net benefits (benefits minus costs) and answer the question: do the final benefits from aquaculture outweigh the costs?



El Salvador

Table: Net Present Value of the Different Scenarios from 1994 to 2050 at Current Market Prices (Thousands of 1992 colons)

Mangrove Management Options	Net Present Value in Thousands of Colons
Current Management Strategy	
Fuelwood and timber	17,552
Artisanal shrimp and fish	718,608
Industrial shrimp	859,236
Rustic salt and shrimp	3,275
Total	1,598,671
Partial Mangrove Conversion	
Clearance logging	55,445
Fuelwood and timber	10,010
Artisanal shrimp and fish	700,981
Industrial shrimp	724,514
Shrimp ponds	105,721
Total	1,596,671
Sustainable Management Strategy	
Fuelwood and timber	23,809
Artisanal shrimp and fish	761,652
Industrial shrimp	1,444,080
Rustic salt and shrimp	3,275
Total	2,232,816

We are able to conclude that the net present value of the sustainable management strategy exceeds that of the other two management options. The net present value of benefits reaped under sustainable management exceeds that generated under partial mangrove conversion by US\$ 73,120,115 (in 1992, \$1=8.7 colons).

If the period for which these benefits were calculated was longer, say 100 years instead of 56, the benefits from the sustainable management option would far exceed those from the other proposed management strategies.

In this light it would seem that conversion of mangrove areas to aquaculture farms needs to be reconsidered. Evidently, mangroves need not be deforested to cultivate shrimp.

There are alternatives for the design and operation of aquaculture ponds that do not degrade the environment, displace artisanal fishers and cause the irrevocable loss of biodiversity.

There are other means of assigning access rights to the mangroves and allowing for the continued, yet sustainable, use of these forests. Concerns about environmental justice and sustainability should guide our choices about all decisions to transform, degrade or utilize natural environments.

The chorus of investors and exporters who champion growth at the expense of equity and short-term profits at the expense of biodiversity must not drown the voices of communities whose livelihoods are lost nor the voices of those who value the continued existence of mangroves.

This article is written by Sarah Gammage, an economist with the International Centre for Research on Women, Washington DC.

Ceara fishermen

Sailing for a cause

A spirited campaign in the shape of a 76-day voyage of the S.O.S. Sobrevivencia highlighted the plight of the fishermen of Ceara, Brazil

The *jangadeiros*, fishermen of northeast Brazil who sail on small rafts, have had considerable impact on Brazil's history. In 1884, Ceara was the first Brazilian state to abolish slavery. Propelling this path breaking decision was a year-long protest by the *jangadeiros*, led by Francisco Jose do Nascimento, the 'Dragon of the Seas', who was the founder of the Liberation Society of Ceara.

At the time, Ceara, located in Brazil's airy northeast, was going through a severe drought which hit agriculture in the region. Not needing slaves, and to help pay their rising debts, the owners began selling their surplus slaves to the state of Pernambuco down the coast. The *jangadeiros*, with their handy *jangadas*, were needed to transfer the merchandise to the ships anchored out at sea.

No one reckoned with the high moral standards of the humble fishermen who had decided on their own that slavery was unjust. To demonstrate their will, the *jangadeiros* began a boycott with the historic phrase: "No porto do Ceara nao se embarcam mais escravos!" (No more slaves will embark from the ports of Ceara)

The *jangadeiros* held fast against threats by the Emperor and his military. To show their unity, the 'Dragao do Mar' even travelled by ship to Rio de Janeiro in 1884 with a gift for the Emperor Dom Pedro II: the *jangada* 'Liberty'. Even though the Emperor refused to see him, the trip was a political success for the abolitionists, as he was given a hero's welcome by the people of the capital.

In 1941, it was the turn of 'Jacare (the Alligator) to sail to Rio de Janeiro with three other fishermen from Fortaleza.

This time, the target was the Military Regime of Getulio Vargas, which was strongly supported by the US. The four men sailed 61 days on a raft made of six tree trunks to tell the President about the miserable working conditions of *jangadeiros* and their need to be included in the country's social security system.

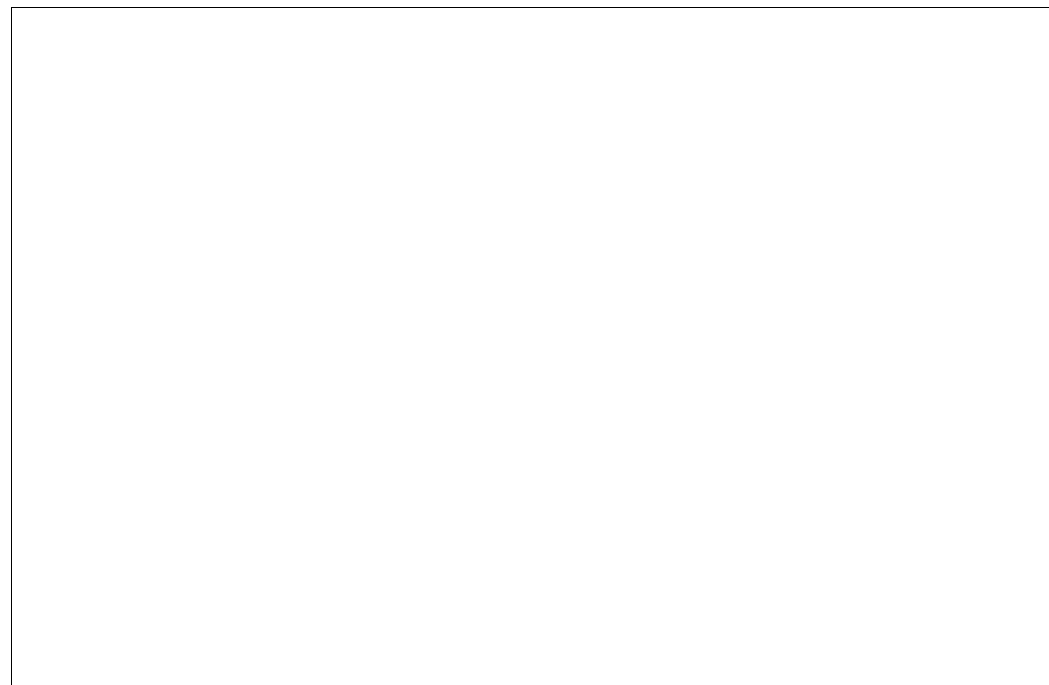
The voyage caught the attention of the movie director, Orson Welles, who was in Brazil at the time making a film on Roosevelt's 'Good Neighbour Policy'. Welles was so captivated by the courage of the *jangadeiros* that he decided to make a film about their struggle instead, doing so against the wishes of the State Department, the Brazilian government, and his then employer, Rio. Rio fired Welles, who proceeded with the project only to experience tragedy.

While re-enacting the *jangadeiros* arrival in Rio, a large wave overturned their *jangada* and, before Welles' very eyes, Jacare was carried off by a wave and drowned. The film project was canned and only completed 52 years later, released by Paramount under the title, 'It's All True',

Just as a film team was in Ceara for the final shooting of 'It's All True', a new protest movement came to life in the small community of Prainha do Canto Verde. Work had begun with the fishermen in 1991 to liberate them from a wicked network of intermediaries that was exploiting their hard and dangerous work and pocketing huge profits by buying their catches of fish and lobster at manipulated prices.

Fishermen's co-operative

After less than a year of working to establish the co-operative of the fishermen, it became clear that there were even greater evil forces at work to keep the



fishing communities in extreme poverty. Real estate speculators were busy buying up peach property using corruption and threats, while, at sea, a growing fleet of motor boats had started to capture ever-growing quantities of lobster using ill-equipped divers and capturing ever-smaller juvenile lobsters. (Both diving and catching juvenile lobsters are prohibited by fisheries regulations.)

The conflict between artisanal fishermen on their fragile *jangadas* and armed bandits on motor boats kept growing. The authorities failed to intervene and enforce regulations, even as four fishermen lost their lives from enemy fire at sea.

The adventurous dream of one young fisherman, Edilson, to sail to Rio de Janeiro, was probably inspired by ‘Jacare’ and his own grandfather, who together with two other fishermen from Prainha do Canto Verde, sailed to Belem, Para on a 14-day trip in 1928. The idea to unite the fishermen of various communities and supporting NGOs gave the trip the sense that it lacked. So, in three short months, the logistics for the trip and the protest campaign were planned and financed.

A week before the scheduled departure, the *jangada* and the crew were presented to the press at the fishing port of Fortaleza. They made the headlines of all the newspapers and TV stations. Taken by

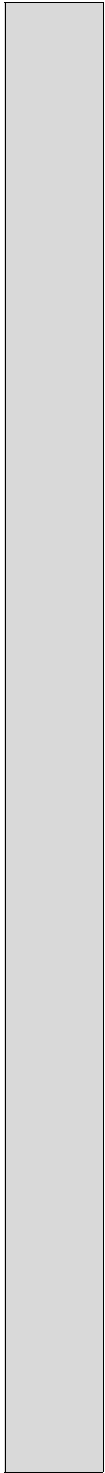
surprise, the Captain of the Port Authority advised that the navy had overruled the authorization for the trip given by the captain responsible for the area of Prainha do Canto Verde, implying that the trip should not take place. But there was no way that the crew, the organizers or supporters of the protest trip would heed the advice.

On 4 April 1993, loaded with emotion, tears, encouragement and worries, fishermen from ports far away came in their *jangadas* to escort the S.O.S. Sobrevivencia on the first leg of the voyage. TV crews, photographers and reporters gave the simple fishermen a preview of what lay ahead of them; hundreds of interviews and TV talk shows on the more than 3,000 km that lay ahead of them.

Absent, as always when things get hot, were most of the representatives of the state, municipal and federal governments. But the speakers who wished the sailors well, were very clear about where the problem lay—the rich are above the law, and few people waste their time looking for justice for the poor.

On its way

Shortly after 12 noon that day, the fishers’ favourite priest, Padre Marco, celebrated mass and christened the *jangada* to send it on its way, well protected by the One who Cares. The small craft was rolled down the



beach, while thousands of well-wishers, even the hardest fishermen among them, let tears flow. Edilson (Fonseca Fernandes), the Captain Mamede (Dantes de Lima), crew members Francisco (da Silva Valente) and Francisco (Abilio Pereira da Silva) were busy tacking the wooden mast to sail through the surf and gain the wide open sea, accompanied by *jangadas* from neighbouring communities, on the first leg of the trip.

The trip had been carefully planned by a small group of young fishery engineers from the local university and volunteers from NGOs working on issues of fishery, ecology and human rights. Twenty stops were planned along the coast of Brazil; contacts with a variety of groups, fishermen's colonies, women's and human rights groups and other movements were planned at each port. Press releases were ready to brief journalists on the scope of the trip and inform them about the great range of problems facing coastal communities all over Brazil.

While the men started to prepare for the unexpected, two young women were getting ready to follow the route in a small two-door Volkswagen. Loaded to the last square inch with pamphlets, background material, press releases, petition forms, S.O.S. hats and T-shirts to be sold to raise funds along the way, and

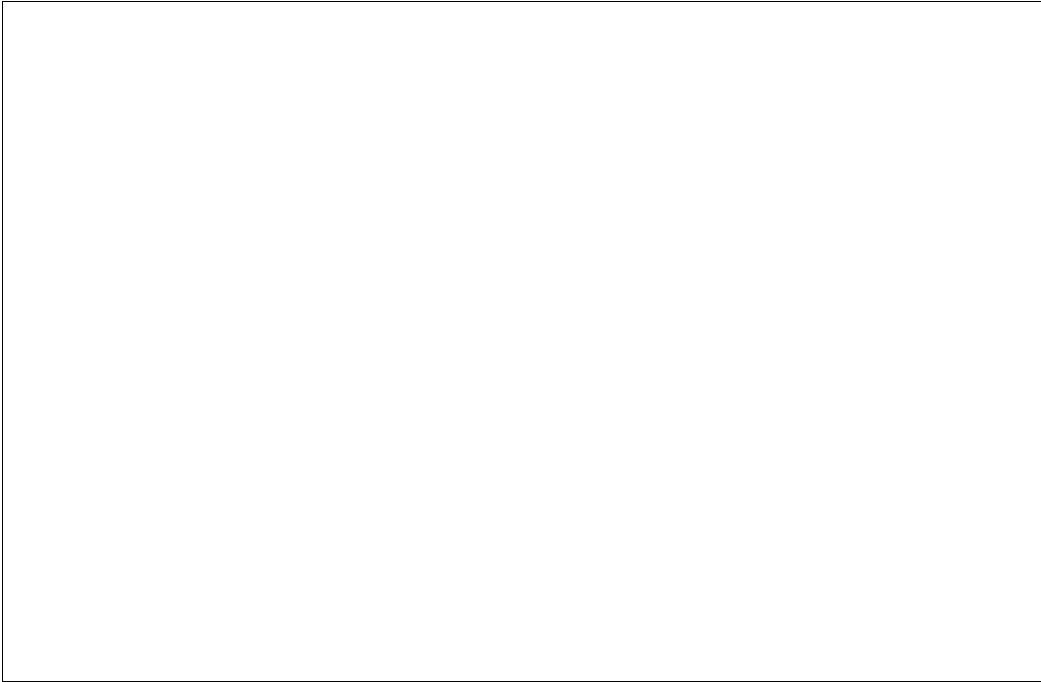
their own little belongings, they took off, after a three-day delay.

Michelle Scharer, who holds a degree in zoology from the University of Central Florida, had come down with fever on the day the trip was planned to start. Her travel companion was Marlene Fernandes de Lima, then president of the Villages Residents Association. Both were in their early twenties and faced a formidable challenge for the next two months, meeting the press, ensuring supplies for the *jangada*, organizing protest meetings and communicating with Operation Headquarters in Fortaleza. To fill the gap of three days, I went ahead to Redonda, Icapui, to meet the navigators and the members of the community and then drove to the third stop to organize local support, before heading back to hand over to the girls.

Back at Prainha, the courage of the crew and the girls rubbed off on the fishermen. On 6 April, they went on strike to protest against delayed payments and the low lobster prices offered by buyers. They went back to sea only when the price went up and the producers were paid in cash.

Storm at sea

The *jangadeiros* faced their first serious problem when they got caught in a 24-hour storm at sea. Used to facing many a storm during fishing, they weathered this one too.



Meanwhile, Michelle and Marlene had made contact with the Sisters of the Convent and the fishermen's representative in Toros, Rio Grande do Norte, unlikely allies who were fighting the local city hail which had sided with a foreigner who was terrorizing fishermen with armed guards against using 'his' beachfront property for landing their boats.

It was Holy Friday afternoon when, in the middle of the procession, Sister Aurea announced over the public address system, the arrival of the *jangada*. It was a great reception for four very tired fishermen, who had endured two sleepless nights, and also attended to Mamede, still running a high fever.

Although not fully recovered, they decided to sail on, after spending three days in this hospitable community and learning more about the local problems—it seemed just like home, full of real estate speculators and pirates diving after lobsters.

Natal was the first capital city on the next segment of their trip. They arrived there on 14 April and got the first taste of the hard life of celebrities—interviews with four TV stations, three local radios and four newspapers. The navy sergeant made up for his superiors when he told the crew that everybody at the port authority supported the trip. After a grand reception in Cabedelo in the State of Paraiba, complete with dazzling fireworks, a parade and a show organized by the local fishing co-operative, they headed for Pernambuco and the historical city of Olinda.

The girls arranged for a dentist's appointment to repair Edison's root canal that had been bothering him for the last four days, while the *jangada* was working its way towards Olinda. The representative of the Fishermen's Pastoral arranged meetings with local groups and helped Michelle and Marlene collect signatures for the petition, and sell hats and T-shirts.

Then they went by sea and over dirt roads through the States of Alagoas and Sergipe, ahead to the country's largest coastal State, Bahia. The problems that were

discussed with the communities in different ports invariably turned to pollution of coastal areas and wetland from industry or sugar cane plantations. There were also problems relating to fishing by divers, trawlers or those using dynamite.

Another common problem was real estate speculation that drove fishermen's families from their homes and threw them back into the hinterland, in some cases forcing them to travel over two hours by bus to go to work, while earlier they used to live right beside their boats.

Exactly one month into the trip, the S.O.S. Sobrevivencia appeared over the horizon for a triumphant arrival in Salvador, Bahia, the city on the Bay of Saints. The crew got a hero's welcome at the Olodum in the historic centre of Salvador, where the world-renowned carnival takes place.

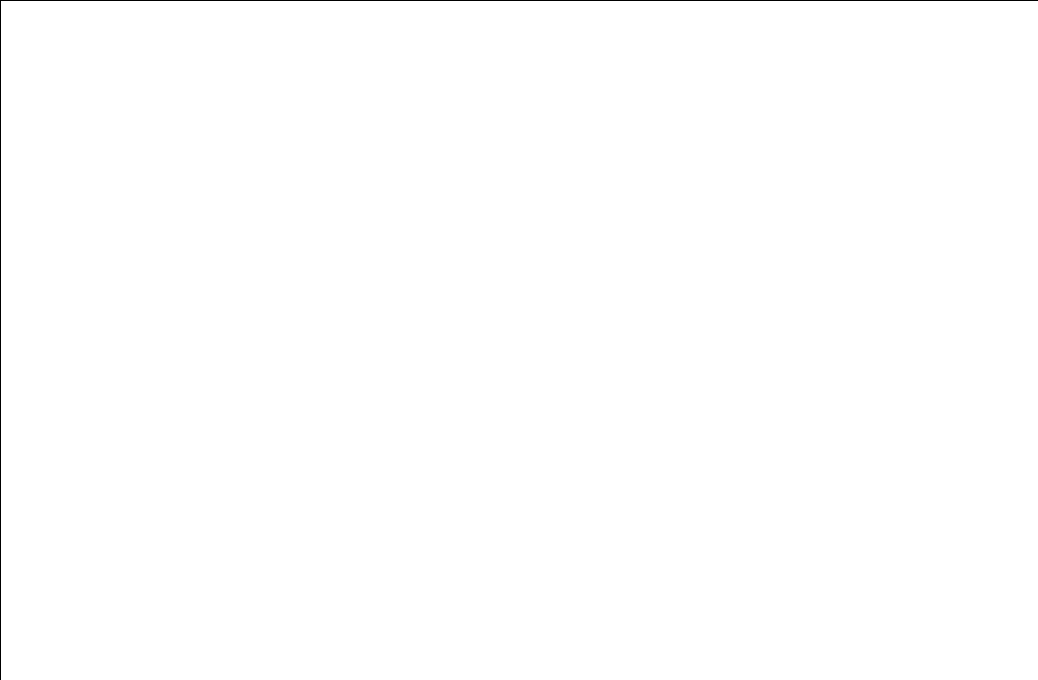
Olodum is not only the home of famous rhythm groups formed of kids who have come off the streets and regularly perform on tour in the us, Europe and Japan. Olodum is a social institution founded by blacks to help them win back pride in their origin. Street children get a chance to go to school, art and music clinics.

Tuesday just happened to be rehearsal day for Olodum and thousands of people had filled the club in historical Pelourinho. The six adventurers got a standing ovation from the crowd and the band beat the maximum volume out of the drums. That night it seemed that all the Negroes of Salvador were fishermen and all the fishermen of Brazil were black, two neglected groups of suffering people that need to recover their pride, unite and fight for their existence.

The captain of the port in Salvador was not so hospitable and required the *jangadeiros* to sign a waiver of responsibility to relieve the navy of any blame in case they should sink. But, on the whole, most of the captains along the route were gracious. Some even invited the crew for dinner at home and praised their courage and spirit.

Letter of praise

Ironically, we got a letter from the Public Relations Officer of the Minister of the Navy in Brasilia, commending us on the



initiative and offering any kind of support and assistance—perhaps a case of what happens when the right hand does not know what the left is doing.

As the trip went on, it became clear how important the female support team was for the success of the campaign and the well-being of the sailors. They looked after just about everything, functioning as look-outs, *escorts*, shoppers, public relations agents and nurses, while facing thousands of kilometres (6,700 km in 74 days) of dirt roads, often in very inhospitable areas and far from habitation.

For the campaigners, the coast of Bahia seemed to have no end, through 16 days of sailing and 10 days of being stuck in the fashionable tourist resort of Forty Seguro due to bad weather. But it was also a time to make friends in new places and to talk shop. Both Marnede and Francisco (Abillo) had earlier fished in the south on industrial fishing ships and so knew some of the areas that lay ahead of thorn.

Back in Fortaleza, we were busy co-ordinating between the support team on the road, the concerned families of the crew, the press and the participating NGOs. In May, we organized four workshops on the campus of the Federal University of Ceara on the themes of the campaign irresponsible fishing of lobster; real estate speculation; neglect of

artisanal fishing; and irresponsible tourism development.

The workshops attracted a good number of experts, students and others interested. Government representatives were invited to present their points of view, but were hard pressed for good answers. The workshops were the basis for concrete proposals that would be presented to all the interested parties and sent to the President of Brazil, Itamar Franco, with signed petitions—over 2,000 were collected.

The President did not respond to the request from the fishermen for a personal audience in Brasilia to present the petition. The Governor of the State of Ceara did not appear and never responded to the proposals. To a foreign journalist, he declared that the *jangadeiros* are long overdue for display in museums.

The support of the media in Fortaleza was impressive. We were invited to several morning news talk shows and given ample time to present the various aspects of the campaign. TV channels, radio and newspapers gave regular updates on the trip down the coast,

Home stretch

After crossing the State of Bahia, the campaigners were on the home stretch. Both the water and wind were getting colder, as they were approaching winter

in Rio. Another weather-imposed stop in Vitoria cost the crew five days of precious travel time.

From then on, there were several difficult spots, with treacherous currents and crosswinds. It took all the experience of Mestre Mamede to avoid a rocky island that seemed to be on collision course with the *jangada*. This was probably the scariest moment for the four intrepid travellers.

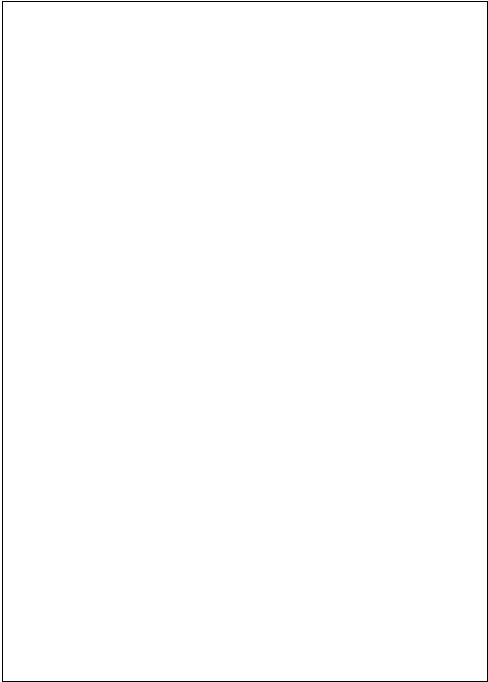
In Rio, the preparations for the team’s arrival were in high gear and everything was planned for Saturday, 12 June, with a fleet of boats ready to escort the S.O.S. Sobrevivencia across the Bay of Guanabara. But the lord and master of the skies once more did not co-operate.

The result was heavy clouds and no wind to move the *jangada*. But on the morning of Wednesday, 16 June, Rio de Janeiro awoke in all its scenic splendour to see, despite no winds, the *jangada* working its way towards the Pracxa XV (Square 15) in the centre of the city, with 15 video cameras shooting its progress from the accompanying schooner.

TV personalities, and songwriter Doryval Cayimmi, were at hand to receive the four modest fishermen and their two fighting ladies, who had travelled 76 days in a memorable campaign, yearning for somebody, somewhere to listen to the call of the fishermen of Brazil. The expedition

ended on 19 June, after a three-and-a-half hour flight back to Fortaleza and a hero’s reception in Prainha do Canto Verde that reunited all those—whether at sea, on the road or waiting anxiously back home—who had given a small part of their lives for a cause.

Despite the negative response of government officials, the fishermen of Ceara did not give up and, over the years, kept up the pressure by forging new alliances to unite the fishing communities. The resulting resurgence of the fishermen’s movement has since yielded some surprising results that are bound to have a lasting and positive impact on artisanal fishing in Brazil. 3



This report is by René Schärer, co-founder of the NGO, Instituto Terramar, member of the Fisheries Committee of the State of Ceara and father of the intrepid Michelle mentioned in the story

Throwing the dice

The development of fisheries in Lake Victoria seems set to follow global trends of overcapitalization

Fishermen all over the world will agree that fishing is a game of chance played with three dice: good weather, good catch and good markets. If all three are tossed in your favour, then your earnings will be good. In most cases, however, at least one of the dice will be loaded against you: despite good weather and a good catch, unfavourable market prices can reduce your earnings. Likewise, despite good weather and a favourable market place, your earnings may be reduced if you fail to make a good catch.

The judicious use of technology can load this game of chance in your favour, granted, of course, that you have the necessary resource rights, technical skills, knowledge of weather, fish stocks and available market outlets.

For example, a more seaworthy boat and motorized propulsion can reduce the risk of bad weather curtailing fishing. A more powerful fishing unit with more equipment like nets and fish finding devices can reduce the risk of a poor market by improving the quality of the catch and making it possible to stock it for longer periods. Improvements in technology can also make fishing safer and less arduous for fishworkers.

Some of these issues are evident in Lake Victoria, which has, for instance, witnessed significant loss of life due to boats capsizing. More seaworthy boats would prevent this. Likewise, motorized propulsion would take the backbreaking toil out of rowing and help the fishermen get home sooner.

In most cases, it is the technology innovators (those fishers who first take the risk of using a new technique or fishing method) who gain the greatest

advantage in the game of chance. However, as more people invest in the new technology, the competitive edge is lost, and soon everyone is using the new technology. The initial increased earnings of the innovators may have enabled them to pay off their capital costs and accumulate wealth. The imitators, who follow, however, are always likely to be at a disadvantage. As catches diminish (or incomes reduce as markets get saturated), earnings may not be enough to pay for increased running and maintenance costs, let alone make up the greater capital required for the initial investment.

This can be illustrated with the case of Lake Victoria's fisheries. The introduction of flax and, subsequently, nylon gill-nets had a major impact on fish catches in Lake Victoria. Initially, significant surplus catches were made, but soon, as more people invested in the nets, catch rates dropped.

It has been estimated that between the early 1900s and 1953, the total length of gill-nets rose from zero to 2,000 km, putting huge pressure on stocks and dramatically reducing catch rates. Thanks to their lightness and strength which made them easier to handle and use over rocky bottoms, the nylon nets enabled fishers to reach previously inaccessible fishing grounds.

However, it also pushed the fishing pressure beyond the level where stocks could replenish themselves. Catch rates soon became unviable. Thus, tilapia catches declined from rates of 25 fish per net when gill-nets were first introduced, to less than one fish per net in the 1960s.

Signs of overfishing

Similarly, over the last 10 years, there have been increasing signs of overfishing and a

reduced catch per unit effort in the two main fisheries. Although statistical data is quite limited, in the case of the Nile perch fishery, both average catches and average size of fish have reduced considerably. Both the *omena* and tilapia fisheries also show evidence of reduced catch rates. These are the classic symptoms of overfishing.

Technology choice and technical change can also be exclusive. Increasing requirements for capital or new technical skills may favour outside investors over local fishing communities. In most instances, technology change in modern fisheries (or the ‘modernization’ of fisheries) has led to substantial additional investments in capital, leading to greater industrialization, vertical integration and, in many cases, overcapitalization in fisheries. Modern technology has dismantled traditional barriers to entry in most fisheries.

Generally, the modernization process in fisheries has not recognized traditional, community-based regulatory and management systems. Modernization has transformed many fishery resources from community-managed to open-access ones. These throw up several implications for sustainability. Open and unregulated access to resources has resulted in unhealthy competition, and has encouraged the use of non-selective and environmentally destructive fishing gear.

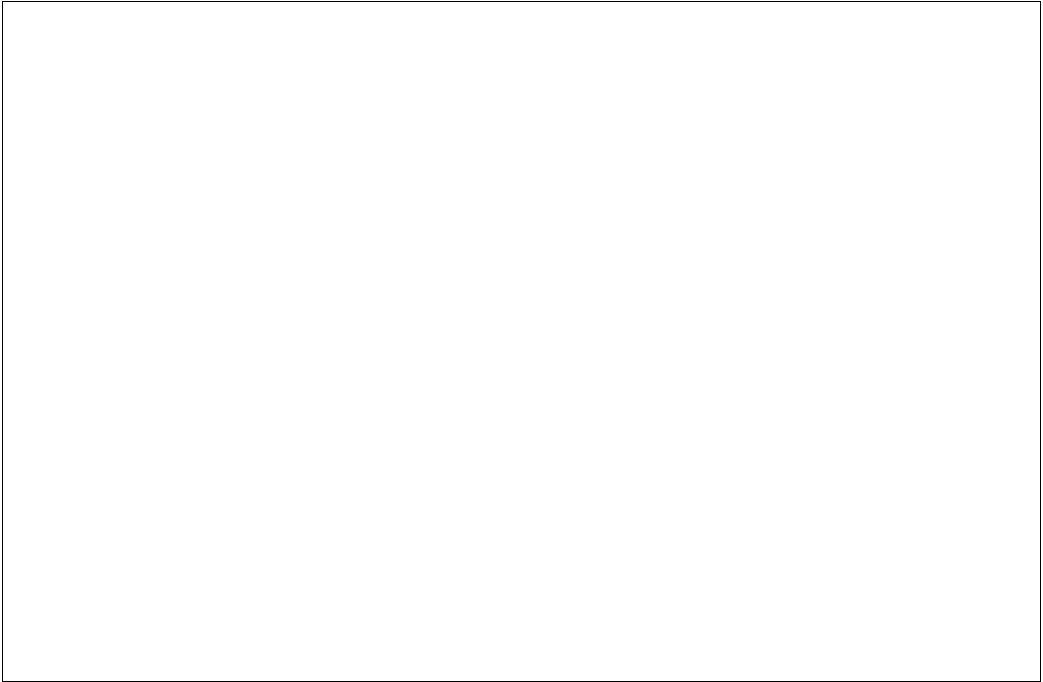
With the boom in the Nile perch and *omena* fisheries over the last 10 to 15 years, such a trend is discernible in Lake Victoria.

The additional capital and running costs needed in modern fisheries tend to encourage an industrialization process which invariably leads to fewer work places (technology becomes capital-rather than labour-intensive), centralization of ownership of fishing assets, and the vertical integration of the fish catching, marketing and processing sectors.

Fishing communities become displaced and disadvantaged. Decentralized communities of owner-operators, fish processors and vendors become replaced by distant, company-owned vessels and factories. With increasing fishing pressure and more competitive markets, the economic returns to fishing reduce. The emphasis then shifts to high-value and value-added fish products for distant markets or bulk catches of species of relatively low economic value to be used as animal feed.

Market-driven

In the end, it becomes the market which drives the fishery and local control is lost. With efforts concentrating on the export of the Nile perch and on *omena* for animal feed, export processing plants and animal feed factories are dominating fishing communities. Less fish is now available for local consumption. This indicates that





Lake Victoria's fishery is well on its way to being a market-driven, rather than community-controlled, fishery.

At this stage in its development, technology change in Lake Victoria's fishery has serious implications for the survival of its fishing communities, for the number of people it can employ, and for the supplies of valuable protein-rich food for local consumption. Fisheries management can not, be left to the mechanisms of the market, neither can regulation of technology be left to ineffectual state laws.

How can fishing communities make appropriate technology choices to become more productive, without undermining traditional management systems and depleting the resource base? The use of capital-intensive, technically efficient hardware for short-term economic gain tends to increase competitiveness, and works against sustainability.

'Intermediate technology' options (between artisanal and capital-intensive fisheries) may offer a 'middle road' and provide for a more equitable development of fisheries. Technology hardware, on its own, can not solve the problem. Appropriate delivery and support systems are also needed, as are institutions to regulate the use of

technology, and social organizations to distribute the benefits.

This is why it is important to support initiatives like those of the Kenya-based NGO, OSIENALA, aimed at community participation in management, organization and empowerment, and why they need to be linked to any future technology developments in the Lake Victoria fisheries of Kenya, Uganda and Tanzania.

Global trends

Without such initiatives, Lake Victoria's fisheries are likely to follow the trend set by fisheries in other parts of the world: increasing centralization and concentration of ownership and management, concentration on high-value fish for export and bulk catches for fishmeal, fewer workplaces, reduced food security, and increased pauperization in fishing communities. 3

This article has been written by Brian O'Riordan of Intermediate Technology, Rugby UK

A Marine Fisheries Policy

The White Paper on South African fisheries, released on 19 June, spells out the following management policy objectives

It is a policy objective that South Africa should develop and maintain a cost-effective fisheries management structure with a broadly recognized acceptability that ensures that:

- fisheries management in South Africa, within the constraints of limited human and financial resources, be conducted on a multidisciplinary basis and make use of the best available knowledge. Special attention should be given to broadening the scope and increasing the effort of fisheries research within economic, social, cultural and other relevant non-biological disciplines, and to integrating their results with those of numerical and biological studies in order to advance a well-balanced, comprehensive basis for important decisions on policy options;
- all fisheries sector practices conform to relevant international standards, laws and treaties; opportunities for meaningful co-operation between South Africa and those countries interested in helping development of the local fishing industry and its associated infrastructure be investigated with a view to enhancing the industry's development;
- levels and patterns of exploitation, determined on the basis of best available scientific information, do not jeopardize the soundness of the resource, its environment or the ecosystem on which biodiversity and long-term

optimal depend; sustainable yields

- long-term management plans, which include operational management procedures, be developed to ensure optimal utilization of all significant living marine resources;
- the harvesting of one species does not endanger the continued existence, or cause the substantial depletion of any other species, and that a variety of regulatory measures be introduced to avoid such dangers, including the full protection of species, MPAs (Marine Protected Areas), restrictions on fishing gear and methods of harvesting;
- fishing sectors be subject to environmental audits where applicable, and investigations on potential detrimental effects on marine and estuarine species and their environment from activities causing environmental disturbance or pollution be initiated or continued;
- implications of an economic and socioeconomic nature, ensuing from various policy options, are properly identified, analyzed and taken into account when decisions are made;
- the principle of national co-ordination and control over the use of South Africa's living marine resources and related research activities be entrenched, but on a basis of involving other authorities in cases of non-mobile marine resources, which occur relatively

Document

nearshore and which do not overlap boundaries. When this is practicable, it may be necessary to involve networks of scientific institutions to assist in the process. The inherent potential of introducing co-management structures shall be given special attention in this respect;

- cost-effective capability and capacity is put in place to enforce fishery regulations effectively, to exercise adequate overall monitoring, control and surveillance and to provide for sufficient contributions to public education, to ensure that the extent and practices of all exploitation of South Africa's living marine resources are consistent with the principle of optimum sustainable utilization. A well-functioning Vessel Monitoring System, tailored to be compatible also with future regional needs in Southern Africa, is considered an essential tool in this respect;
- institutional structures of fisheries management in South Africa adequately meet functional demands linked to the core role of providing the capability and the capacity for the effective implementation of the fisheries policy by sound management. Furthermore, institutional structures should minimize bureaucracy but allow adequate opportunities for user and interest groups to raise concerns and make inputs to decision making, and should also promote the necessary research, advice and channels of communication for the implementation of responsible fisheries management through national and provincial participation and representation. Empowerment of authority and lines of communication between institutional levels and bodies should reflect realities of policy and management responsibility, thereby fostering realistic management accountability and transparency;
- an ethic of training in its broadest sense be promoted within the fishing industry and its associated community;

- adequate consultation take place with representative, visible industry organizations and democratic public bodies, allied to open, transparent administrative procedures;
- an integrated strategy of development and a coherent plan of strategy implementation, including the addressing of appropriate funding schemes, be developed in order to create a favourable environment for fisheries sector development. Some of the features of a fisheries sector development strategy should be, first, to adopt short-, medium- and long-term perspectives, realizing that processes of development are difficult and complex and that they take time, and second, to support the establishment of an adequately funded specialized unit for fisheries and mariculture sector development (UFMD). Special attention should be given through this development plan to schemes of, and support for, education, training and transfer of technology; the organizing of some decentralized structure of advisory service units to cater for, for instance, support to improving local capacity of organizing and managing small business enterprises, disseminating information related to the supply of goods and services, markets, research, fisheries, mariculture and other governmental management institutions;
- the establishment of basic infrastructure facilities in order to minimize post-harvest loss, improve on the soundness of working conditions, product range and product quality;
- the undertaking of a comprehensive study on potential opportunities of developing a wide range of mariculture and/or fish farming/sea ranching activities, with a view to adopting any new technology continuously becoming available worldwide to

<div>Document</div>	<p>prevailing South African conditions. Possibilities of attracting external donor financing and expertise to facilitate such a study should be investigated.</p>	<p>or if deemed appropriate, a part-time fisher.</p>
	<p>It must be emphasized that all these need to be put in place to achieve the long-term sustainable utilization of all natural living marine resources of South Africa, and of the environment in which they exist and in which mariculture activities may occur, to the benefit of the country as a whole,</p> <p>The human resource needs of the fishing industry are multidisciplinary in nature. A culture should be encouraged where labour is seen not merely as a cost of production but as mankind with the dignity this entails. Good labour relations will be promoted.</p> <p>Fair, humane and acceptable labour practices, workers' rights, job creation and security, sound working conditions, health and safety, and welfare benefits of employees in the industry will be encouraged and, where appropriate, regulated. It is necessary to register all fisherfolk. Therefore, it will be necessary to find suitable parameters in order to establish a clear definition of a 'fisher' and the level of activities which make him or her eligible for registration as a full-time,</p>	<p>It is a policy objective that holders of fishing rights and other fishing industry operators should provide acceptable conditions of employment for all employees.</p> <p>Within the Government's administrative structures, policy matters related to labour and employment in all sectors of the economy are the special responsibility of the Department of Labour.</p> <p>The Ministry and the Department will, however, within the constraints of its specified statutory terms of reference, its scarce human and financial resources, and its obligation to give priority to core activities and responsibilities, continue to lend support to efforts at fostering improved relations between fishing industry employers and their labour force. If required, it can also contribute in a facilitating and liaising role to improving communication and relations between the Department of Labour and representative organizations in the fishing industry.</p> <p>Legal report The full legal report identifies the instances in which it will be necessary to amend the present Sea Fisheries Act in order to achieve the policy objectives. It also indicates those instances where the</p>

policy recommendations are not achievable by means of legislation.

The more important changes proposed to amend the Act include inserting in the Act, a statement of policy objectives and principles in order to ensure that the Act would be interpreted and applied in accordance with the policies identified in the policy itself, specifically with regard to the RDP and certain recent developments in international law; specific recommendations are also made for legislative changes to achieve the policy's objectives in respect of access rights, in particular commercial access rights, recreational fishing, subsistence fishing, foreign fishing and mariculture.

With regard to Institutional Structures, the Legal Task Team based its findings on the provisions contained in the original proposal submitted to the Minister in June 1996, because an approved version of the White Paper dealing with this topic was not available when their report was being drafted. Certain changes of a philosophical nature would now be necessitated.

On resource management, the Legal Task Team recommended the incorporation of management plans into legislation.

Certain changes are also proposed to strengthen the enforcement aspects of the present Act. These include strengthening the penalties available and increasing the powers of fisheries inspectors, introducing provisions on the use of evidence gained from vessel monitoring systems, as well as the inclusion of a new offence of failure to stow fishing gear correctly.

A considerable number of amendments would be required to bring the present Sea Fishery Act into line with the policy objectives.

If these amendments are introduced, they would be of such a technical nature that they would have the effect of introducing further complexities to the Act.

The Department accordingly recommends that the present Sea Fishery Act be repealed and that a new law with

respect to utilization of living marine resources be drafted. However, it is further considered, in any event, that a new Act is justified in view of the new policies that need to be introduced.

An example would be the need to establish a Commercial Public Company, as outlined in 4.6.1.1. New policies will only be fully effective in the context of a new Act. With a new Act, it will be possible to achieve both the necessary degree of transparency as well as ensuring effective participation in the decision-making process.

This is excerpted from the White Paper on a Marine Fisheries Policy for South Africa, prepared in May 1997, and officially released on 19 June 1997.

Gender

The enemy is not just ‘out there’

A trip around Senegal brings forth same disturbing perceptions about the common enemy that confronts fisheries

In the Woluf language, ‘yaboye’ means the sardinelle and mackerel caught in plenty by the coastal fishers of Senegal. Yaboye is the people’s food, bought and sold daily on the beaches of the fishing villages of this West African nation. It ferments in the brine of the vats of the women fishmongers, after being landed at night in Gut Ndyar. It is peddled in the markets of Thies and it is transported to Mali and Burkina Faso.

Yaboye is pervasive and an essential ingredient for the food security of the Senegalese people. It is a resource that supports thousands of fishing pirogues, not to mention a cast of thousands of handlers, brokers, buyers, sellers and processors. It also is what the hardworking families of Senegal eat.

So why would the Government of Senegal place yaboye on the table of negotiations with the Europeans over a new fisheries agreement? Why would they sign an agreement against the wishes of CNPS (Collectiv National des Pecheus du Senegal), the organization representing the men and women fishers and fishworkers of Senegal?

Why would the Senegalese authorities allow 22 European industrial seiners to come to Senegalese waters every year to take 25 million kg of this fish for sale and consumption in Europe? Why would the authorities agree to such large allocations, when they know that enforcement is well nigh impossible? (The President of CNPS, Arona Daigle, believes that thrice the authorized amounts will be finally caught.)

I was in Senegal on 25 March, with Frank McLaughlin, President of the Maritime Fishermen’s Union (MFU), when the agreement with the Europeans was

signed. This agreement preoccupied not only our hosts, CNPS, but the entire nation. One wry observer from the fishing community of Mbour quipped, “These Europeans send us their ‘vaches folles’ (mad cows) and then they take away our yaboye in return.”

As far as we could see, the Senegalese citizens were not going to take it lying down. It will remain a significant challenge for CNPS to keep the issue in the public eye and to shame the authorities in Dakar and Brussels into revising an agreement that is a travesty of North-South co-operation.

We know the follies of industrial fishery and we know the powerful forces that back these fleets. Our own MFU represents the small-boat inshore fishers of the Maritime provinces of Canada (including Newfoundland). Our fishers joined the MFU in the late 1970s, having experienced the decimation of their herring stocks over the previous decade by industrial herring seiners, not from Europe or the US, but from our own Pacific coast.

In our case, the inshore fishers won a partial victory against the seiners, but only after the resource had been devastated and the seiners made effectively bankrupt. It is to the credit of the MFU that we now have them contained. Yet we have no illusions about the difficulties of getting this type of fleet under control before the resource is completely fished out. The Senegalese can not afford to wait for the industrial seiners to go bankrupt and then move on—the yaboye is too vital to the country’s food supply and to the coastal economy.

Forming alliances

With its extensive network of members and supporters, CM’S should build up a

campaign and form alliances with other progressive forces. The eventual result may be success on the yaboye issue.

In my opinion, however, it will not be a one-dimensional fight. Although the fact of Europeans grabbing food from Africans is scandalous, the issue will be downplayed by the authorities, politicians and experts. The quantities of fish caught will be minimized in the European Parliament, while the trade-offs will be trumpeted.

Foreign fishing in Senegalese waters is a long-term issue for CNPS, one of many that it, as a fishers' organization, has to deal with. The growth and organizational strength of CNPS is much more important than any other issue, including the European fishing agreements that target small pelagics.

For now, though, what is more vital is how CM'S builds up the yaboye issue to also gain support amongst its members and the fishing communities, from St Louis to Cassamance. The Government of Senegal itself is not monolithic. CNPS needs not only to confront it, but work with leaders and technocrats who display goodwill.

It is easy for an outsider to romanticize the struggles of someone else, but fishworkers' supporters can not afford such indulgence. All our organizations are vulnerable in the extreme. Members can be inspired by ideals and solidarity, but the question of the daily bread and butter is always on their minds. We suffer the contradictions of all primary producer organizations. We have staff and volunteers who work in conditions of insecurity, sometimes with little pay and facing conflicting demands on time and emotions. Burnout is widely prevalent, delusion never far-off.

To borrow a saying from the world of sport, "You have to stay within yourself." This is true for the CNPSS and MFUS of this world. Our strength and value come from remaining independent and broadbased, all the while recognizing that any single issue has the potential to sap our strengths and our complexities. As a westerner, I could only dimly sense the strength and complexity of Senegal and

CNPS. History, after all, does not exist in textbooks—it is all around. One moment, the radio blares Celine Dion into the fishermen's huts ten paces from the fish-landing sites on beaches where old donkeys haul the fish in carts.

The next moment, Babou Mal, a West African Bob Dylan, wails an inspirational ode to Africa, to the sounds of the ancient cora, As the herds of sheep grow in number on the crowded streets, wending their way daily into the market to be sold or sacrificed, you can sense the approaching feast of Tabaski.

On the outskirts of Dakar is the fisheries centre, CRODT, which charts fish habitats with digital satellite tracking, while the fishers of Guet Ndar plot their moves as surely as the Three Wise Men in search of Baby Jesus.

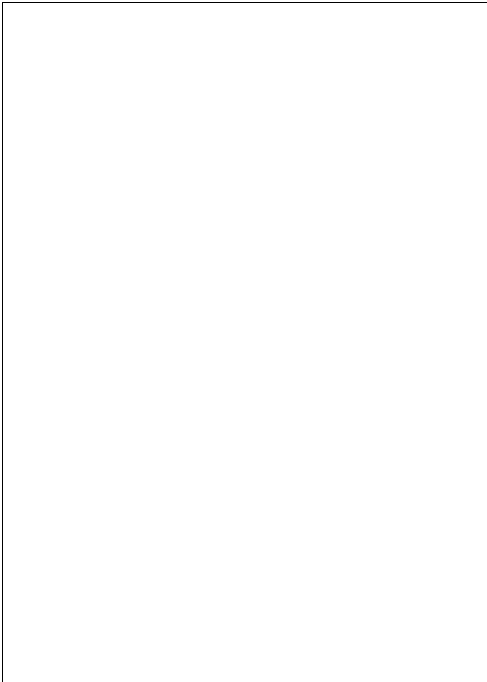
Lamine, a CNPS supporter, evokes the colonial past as he describes the days he used to wait at the gate of the peanut oil plant to be called in for a day's work. Nearby, the French maintain a military base. My colleague spends the afternoon on lie Goree, at the mouth of Dakar's harbour, where the old quarters for millions of African slaves en route to America has been preserved as a museum.

The history, dignity and civility of the Senegalese people grows on you at every encounter, where the greeting "Salamalikum" is followed by a string of exchanges about each other's health, and that of the family, a prayer to Allah and a parting "Inshallah."

The civility is evident in the one-year old child who can not yet walk, but greets the stranger with a handshake and a smile. The act of sharing from a common bowl of rice and fish, yams, manioc and cabbage is spiced with a gentleness in the pace of eating. The fish is carefully separated from the bones and the food is discretely directed to your corner of the bowl, when your supply is diminishing.

Eke out a living

Though I had been to Senegal twice earlier, never before had I been struck by how hard every one works to eke out a living, to make life civil and bearable. The government seems so distant from daily



life, be it in matters of basic maintenance of *sewage* pipes or in disbursing old-age pensions.

The state seems to be widely viewed as a burden to be endured, feeding off an already overburdened population. Then there is the problem caused by the Sahel, the creeping desert that is driving more of the population to the overcrowded fishing areas.

In Senegal, we were received in common cause, as fellow warriors of inshore fishers, acknowledged friends, speaking in the same tongue about the problems of the fishery. All of us know that the common foe is not just 'out there'. It exists in the cost of fuel doubled by the devaluation of the Senegal franc, and in the incessant need to pay off the mortgage on the pirogue.

It also exists in the glut of fish that can not be handled by the local infrastructure. The enemy exists in the credit union that plays favourites and blacklists the family with the wrong name, a union that is controlled by the local politician for political gain and economic reward.

The enemy is also the foreign trawler that rams into the pirogue in the dark of night, within the exclusive six-mile limit. It is in the sea itself, as the pirogue loaded with fish and a dozen crew members approaches the beach landing site and is

suddenly overwhelmed by an unexpectedly large wave.

The enemy can even be found in the academies of Dakar, France or Canada which make the young ignorant of their society and impotent in the face of social reality. It lies in the legacy of polygamy and the empty grandeur that builds a massive Marriot President Hotel replete with golf courses but no guests.

The enemy sits in the World Bank, which declares the vital rail link between St. Louis and Dakar obsolete—let them walk, so the Bank seems, to say. The enemy drives the pirogue owner to burn out fishers by 35 years of age, and the Korean super trawler that takes the pirogues on board and pilots, them to fishing grounds far from the coast and then discharges them at sea, with no compasses or radios.

The Senegalese fishery is one of the world's most productive, landing a quarter of a billion tonnes of fish a year, but it strains under impossible burdens. It has to support a population driven from the land by desertification, and excluded from the workforce by the international division of labour. It has to support 60,000 fishermen and women and another 240,000 shore workers. To ask it to support a bloated, overcapitalized European fleet is to invite the wrath of God.

Of course, we Canadians would never demand as much from our fishery. Of course not, that is why our coastal communities recently vented their wrath on the governing Liberals, while the cities in the centre of the country overwhelmingly voted them back to office. No, I would say there is much that coastal communities everywhere have to say to one another. Yaboye is the people's food—for the people it must remain. 🐟

This piece is written by Michael Belliveau, executive secretary, Maritime Fishermen's Union, New Brunswick, Canada

News Round-up

Subsidies cut

In early June, at the end of a two-day workshop on policy recommendations for sustainable fisheries, the World Wide Fund for Nature (WWF) and the **United Nations Environment Programme (UNEP)** jointly called for a reduction of over US \$50 billion in subsidies. These were meant to be spent annually by nations worldwide in excess of fish harvest revenues. The organizations said this was a major stimulus in encouraging uncontrolled over-competitive fishing that depletes fish stocks.

Behave!

The New England Fishery Management Council has mooted a voluntary, non-binding Code of Conduct to be discussed by a Responsible Fishing Committee. The proposed code urges commercial fishermen to protect the fishery resource, ensure high-quality products, advance scientific knowledge, keep abreast of technological innovations and develop mutual respect and trust. Phew! What a tall order!

Be responsible

Self-regulation seems to be the order of the day. A couple of months ago, a coalition of US seafood associations and

companies announced the development of a voluntary set of 'principles for responsible fisheries' to guide the US seafood industry in responsible resource use.

The principles seek to improve the way seafood is caught, processed and distributed; to ensure environmentally sound

use of seafood resources; and to offer guidance from the fishing industry to government managers.

Elements of the fishing industry adopting these principles are expected to co-operate with government managers to improve resource use and management.

And don't just fish

"It is no longer enough for fishermen to simply know how to operate a boat and catch fish," says a recent report on responsible fishing prepared for the Fisheries Council of **Canada**. Although Canada claims to have one of the most comprehensive fisheries management systems in the world, crises abound. Witness the

sharp decline in recent years of stocks of groundfish on the Atlantic Coast and salmon the Pacific Coast.

Canada's Department of Fisheries and Oceans (DFO) has developed a new 'vision' for the future management of Canadian fisheries. This is based on the concept of co-operative management, and is consistent with the recommendations contained in FAO's Code of Conduct for Responsible Fisheries.

The long-term strategy of the DFO is to transfer more responsibility for fisheries management to the fishing industry, while maintaining legislative responsibility for protecting stocks.

Slamming salmon

On behalf of the David Suzuki Foundation, the Friends of Clayoquot Sound and Greenpeace, the Sierra Legal Defense Fund in the US has prepared a report entitled *Containing Disaster: Global Lessons on Salmon Aquaculture* that discusses negative aspects of salmon farming. Aquafarmers may find its contents interesting, even if uncomfortably so.

Dear President...

In late May, several organizations representing the interests of fishworkers in the **Philippines** sent

an open letter to President Fidel V. Ramos. It urged Ramos to undo the disastrous effects of the 22-year old presidential Decree 704, promulgated to fully exploit the Philippines' fishery resources. The signatories, including Bigkis Lakas Pilipinas, specifically asked for reforms to protect mangroves and fishworkers' rights. They also demanded priority for fisherfolk co-operatives in fish pond lease agreements.

Scot-free-for now

Vessels from **Namibia** found fishing illegally in South African waters may yet escape the arms of the law, since the current laws on marine fisheries do not provide for punitive measures

against such offenders. Sihleni Ndjaba, Namibia's acting permanent secretary for fisheries, was reported by Xinhua News Agency as saying that the country was planning new legislation under which Namibian vessels spotted in other territorial waters would be fined or impounded.

Hol(e)y war

The European Union's plan to manage the region's fisheries through regulating the mesh size of nets has invited the wrath of fishermen. Hundreds of

striking French fishermen blocked several Channel ports, crippling traffic to and from **Dunkirk, Calais** and **Boulogne** in late April. The fishermen were protesting EU regulations increasing mesh size for fixed sole nets from 80 mm to 120 mm. A French court ordered the fishermen to life the blockade. The fishermen complied, but only after French officials promised to raise fishermen's concerns at a meeting of EU ministers.

Satellite tracking

Those all-seeing eyes of the Big Brothers up there in space may soon help monitor fishing fleets and avoid fresh fishing battles in the waters of **Europe**. Using a combination of Global Positioning System and satellite tracking technology, trials for a new system have been conducted by the European

Commission in Brussels. A similar system is also being tested out for the ASEAN region, where a satellite tracking system could be more centralized and thus much less complex.

Bedding down

Japan, India and an East European consortium of nations have joined the National Oceanographic and Atmospheric Administration of the US

to hire a Seattle-based company, Redmond's Sound Ocean System Inc., to conduct

environmental tests to determine how future deep Seattle-based company, Redmond's Sound Ocean Systems Inc., to conduct environmental tests to determine how future deep seabed mining would disturb sea life on the ocean floor.

Sock! Pow! Bang!

Around 35 Puerto Rican fishermen from the island of Vieques were reported to have clashed with troops aboard six naval vessels from **Belgium** and the **Netherlands** anchored in a popular fishing area which the fishermen claimed was reserved for civilian activities. The US Navy owns portions of Vieques and allows other nations to conduct exercises there.

Drifting away

The EU Fisheries Council is considering a co-financing plan to convert the swordfish fishery of **Italy** away from drift-net use over the 1997-1999 period. The proposed plan would provide financial incentives for fishermen and vessel owners to encourage them to cease or modify their drift-net fishing.

Herring plant

State and local officials in Massachusetts, US are

reviewing a proposal by the Dutch fishing conglomerate, Parevliet & Van Der Plas, to construct and operate a 50,000 sq.ft. processing plant for herring and some mackerel at a state-managed pier in Gloucester.

About 20,000 tonnes of herring would be packed, frozen and shipped to European markets annually, providing an estimated US \$10 million in economic benefits to the community.

The Dutch company has offered to fund the conversion of Gloucester vessels for herring fishing.

Sad sardines

Fishing industry officials in **Japan** have reported that, due to a severe decline in the harvest of sardines by Japanese fishermen, sardines for canning are being imported from the US and Mexico. The price of sardines in Japan has thus risen substantially.

Stop dumping

Over 550,000 tonnes of discards of edible fish were dumped into the **North Sea** last year, according to an assessment report by the secretariat of the fifth North Sea Conference, prepared for the Intermediate Ministerial Meeting on the North Sea in Bergen in mid-march. That is roughly equivalent to the current Danish catch of sand eel dedicated to fishmeal and oil production.

Stuart Barlow, director general of the

International Fishmeal and Oil Manufacturers Association, has called for control of discards from the human-grade fisheries thrown back into the sea. He said that this practice represents enormous waste of valuable protein from the North Sea. If landed, these fish could help meet the European demand for whitefish and would cut back imports of this commodity. This would save the European countries around US \$55 million each year, according to Barlow.

Oysters for Maoris

An agreement reached between the government of **New Zealand** and the Treaty of Waitangi Commission has given New Zealand's Maoris a 20 per cent share of the oyster catch from the Foveaux Strait. Oysters have not yet been included in the Quota Management System agreed in the 1992

Maori fisheries settlement.

For the current agreement, the government bought quotas from existing permit holders at a cost of about US \$4.2 million.

The annual revenue from a 20 per cent share of the Foveaux Strait oyster catch is estimated to be at least US \$ 0.7 million.

*F*ishermen like to talk about their esprit de corps, and it is true that there is a warm camaraderie, a sense of being a part of an elite brotherhood. Fishermen are like combat veterans who feel understood only by their comrades who have survived the same battles. But fishing is a constant struggle for economic survival. Each man works for shares of the catch. Anyone who can't keep up, whether because of injury or age, is harassed out of the fishery. There are few fishermen over fifty. And because fishermen are technically self-employed and not salary earners, governments have been slow to recognize claims to social benefits for those who are out of work.

— from **Cod: A Biography of the Fish That Changed the World**
by Mark Kurlansky



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, researchers and scientists, ICSF's activities encompass monitoring and research, exchange and training, campaigns and action, as well as communications. SAMUDRA REPORT invites contributions and responses. Correspondence should be addressed to 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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