

The Salmon Demon

The growing global opposition to destructive salmon farming has found vocal expression in Chile and Argentina, highlighting issues related to labour and working conditions

The industrial salmonid monoculture in Chile has a history of more than three decades of productive and territorial expansion in the country's waters, which has transformed the South American country into the world's second-largest producer of Atlantic salmon, accounting for 30 per cent of global supply. Thirty-four thousand people work in salmon cultivation farms and processing plants, and in associated activities, such as terrestrial and sea cargo.

Currently, 40 per cent of workers in the salmon industry work through various subcontractors. Temporary and precarious jobs, in the form of fixed-term jobs, prevail. This asymmetric contractual relationship allows the client salmon companies to reduce costs, while disclaiming responsibilities in instances of environmental, health and labour crises. For their part, subcontractors maximize their profits by taking advantage of the low bargaining capacity of workers, given the high unemployment rates.

This situation leaves workers without social protection, and unable to unionize and participate in negotiations to defend their rights and to improve their living and working conditions. This expression of 'savage capitalism' contrasts with that existing in Norway, the world's leading salmon producer, where the State recognizes the democratic and social rights of workers.

A global record for labour mortality

The working conditions in this export industry are so precarious that more than 60 salmon workers' deaths were registered between 2013 and 2021. The industry registered an accident rate of 4.12 per cent in 2019, higher than in

Chilean agriculture and fishing (3.9 per cent) and even higher than in the construction sector (4 per cent). The most affected are divers and workers in maritime and land transport. In the case of divers, the main causes of accidents are decompression sickness and deaths by suffocation when they get entangled in the nets of the salmon pens. Associated diseases include otic barotrauma (inflammation in the ears), dysbaric osteonecrosis (damage to the bones caused by nitrogen embolism) and acute sinusitis. In the case of the ship workers, the causes were falls into the sea, collisions with other—mainly artisanal fishing—vessels and accidents on deck.

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However, the number of accidents in the Chilean salmon industry must be compared with the rate of accidents in the industry at the global level. Approximately 6,000 divers work in approximately 3,500 raft cages distributed over almost 2,000 km of the Chilean coastline, mainly in Patagonia in the south. Ninety per cent of these workers have only a basic diving licence. Most of these divers are artisanal fishers who work in salmon farms during the closed season in the fishery. Recruiting these fishers informally is cheaper for the companies than hiring professional industrial divers. Many of them do not have the necessary training and the appropriate implements to work at depths up to 30 m.

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A salmon farm in the Reloncaví estuary in Chile's Los Lagos region. The working conditions in the industry are so precarious that more than 60 workers' deaths were registered between 2013 and 2021.

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These underwater workers perform rapid cycles of successive daily dives without the vital decompression and rest time—a practice known as “yo-yo diving”. They are not provided any health insurance by their employers. In the first three months of 2021 alone, three divers died in the Aysén region.

Added to this is the fact that Chilean salmon farming has the lowest wages and the longest working hours in this industry globally. The outsourcing of diving services in the salmon industry is responsible for the prevailing job insecurity and high accident rates. This labour reality places Chile with the highest mortality rate in the salmon industry worldwide. This is in sharp contrast with the Norwegian salmon industry, where the death of only one diver was recorded between 2012 and 2018.

Women in salmon processing

Thirty-three per cent of Chilean salmon workers are women, who constitute nearly half of direct employment in processing plants. They work long hours, standing in cold and humid

conditions. Frequent urinary infections among the women are associated with the low temperatures and humidity. Their labour rights have feeble protections: Pregnant workers are considered unproductive, so women are often forced to leave because of the working hours, in violation of the country's laws protecting pregnant workers. Also, permits for medical check-ups or facilities to breastfeed children are difficult to obtain. The employers do not provide nurseries or crèches to the women.

Although intensive working conditions, seasonal jobs and low wages are rampant in Chilean food industries, it is surprising that such practices against women have not been checked by the authorities or by the transnational salmon companies, considering that they violate the laws in the countries where they are headquartered, and contravene the Guidelines for Multinationals of the Organization for Economic Cooperation and Development (OECD).

Added to the high rates of occupational accidents in salmon

farming are other health hazards, caused by the intensive use of chemicals, such as antimicrobials, antiparasitics, potentially carcinogenic antifungals (malachite green and crystal violet), antifouling paints based on copper and heavy metals, as well as 36 types of disinfectants whose active compounds are hydrogen peroxide, chlorine dioxide and peracetic acid.

The work system in salmon processing plants encourages exploitation since wages are linked to workers' production volumes. The consequence is a prevalence of disabling musculoskeletal diseases among workers, associated with the long and strenuous work, performed standing up and repeated at a constant speed under cold and humid conditions.

In this context, workers' organizations have denounced a recent agreement between insurers and salmon companies to exclude tendonitis, carpal tunnel, lumbago or rotator cuff injuries—usually covered by the premiums—from being classified as occupational diseases in the salmon industry. It is interesting to note that the insurers, client companies and subcontractors do not carry out educational programmes on preventive measures to reduce accidents and injuries; nor do they provide hyperbaric medicine to underwater workers.

Anti-union practices

Salmon companies regularly indulge in practices such as the use of multiple fiscal identification numbers to evade audits or legal responsibilities; the creation of parallel negotiating groups during salary negotiations; 'black lists' of workers who unionize; and the establishment of joint committees controlled by the companies. Workers' organizations have repeatedly denounced such anti-union practices, often carried out in collusion with labour and health inspectors. Organizations that fight against abuses are either blocked or intimidated. This explains why only 14 per cent of workers in the salmon industry are unionized, as opposed to 50 per cent in Norway.

Salmon transport workers

The Chilean fleet for transporting live salmon and supplies has 729 vessels,

including 54 well boats whose number has been increasing steadily since 2020. There is a growing presence of Norwegian capital in these services.

The Federation of Officials of Merchant and Special Ships of Chile (Fenasiomechi) is fighting to implement minimum security provisions according to the guidelines and recommendations of the International Maritime Organization (IMO). In turn, it has promoted a bill to modify Decree Law 2222 on maritime navigation and accidents, to be able to establish responsibilities in the face of frequent fatal collisions between salmon farming vessels and fishing boats, partly due to the former's use of automatic pilot systems in internal waters in the Chiloe, Aysén and Magallanes regions.

Fenasiomechi has also demanded decent wages, since the transport workers' salaries are 25 per cent lower than the market standard. They have also demanded that the companies comply with stipulations for working hours and hours of rest in the labour code.

Salmon and the international market

Fish is very important to the Chilean economy and livelihoods. Chile is the seventh-largest fish producer in the world—the global leader in cultivated trout, fifth in the export of algae for human consumption, and second in the production of both salmon and fishmeal. More than 80 per cent of Chilean industrial fisheries and aquaculture production is destined for international markets.

The new context of political, social and cultural transformations in Chile constitutes an opportunity to build a broad alliance between the socio-environmental movement, workers' and human-rights organizations, as well as coastal communities and indigenous peoples, with consumer organizations in international markets.

Social mobilization and citizen pressure in Chile, together with international influence, will lead to the necessary political will required to address the abusive practices of the salmon industry, which threaten the human rights of workers and the health

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of the oceans. Argentina has recently set an example, witnessing the first victory of the coastal communities over the salmon industry Goliath.

Argentina: The first to ban salmon farming

On 30 June this year, the legislature of the Argentine province of Tierra del Fuego enacted into law a bill prohibiting the salmon farming industry from the waters of the Beagle Channel (Onashaga in the Yagán language) in the country's Patagonia region. The bill by deputy Pablo Villegas of the Fuegian Popular Movement, was approved unanimously by legislators, making Argentina the first country in the world to ban this transnational industry.

In Argentina, the only viable place for the establishment of the salmon farming in open-net pens is the pristine waters of the Beagle Channel, which is home to great terrestrial and marine biodiversity, including iconic species of mammals, birds and 50 per cent of the macroalgal forests—key carbon sinks—in the country.

Villegas pointed out that what happened “is a bet in favour of life and economic activities such as tourism, which generates employment and benefits various social sectors.” The message is clear: saying no to salmon farms is possible.

This blow to the transnational salmon industry was despite a major diplomatic push in both Argentina and Chile. In March 2018, the Norwegian King Harald V and Queen Sonja visited the Casa Rosada—seat of the Argentine government—to sign a co-operation agreement to study the feasibility of developing intensive salmon farming in Argentine Patagonia. The agreement was rejected because of demonstrations carried out by the inhabitants of Tierra del Fuego and the neighbouring Yagan communities of Puerto Williams, the Commune of Cape Horn and Kawesqar of Puerto Natales in Chile, together with the various environmental organizations of both the South American countries.

Following this, the Norwegian Royals visited Chile in March 2019 to lobby for the expansion of the salmon industry into the pristine waters of the Magellan region. They travelled with an entourage of 60 businessmen to the cities of Punta Arenas and Puerto Williams in Chilean Patagonia, where they were received with strong protests from the local Yagan and Kawesqar communities and NGOs.

Civil society organizations and consumers in Chile, the United States, Canada, Argentina, Norway and Scotland—who produce and consume most of the farmed salmon in the world—must take advantage of this growing opposition and eliminate destructive salmon farming from one of most pristine regions of the planet. 3

For more

The Salmon industry and human rights in Chile: Sector-Wide Impact Assessment

<https://www.humanrights.dk/publications/salmon-industry-human-rights-chile-sector-wide-impact-assessment>

Blood Salmon from the Global South

<https://www.ecoceanos.cl/wp-content/uploads/2019/05/SalmonesDeSangre-Ecoceanos-27mayo2019.pdf>

Paradise Lost

https://www.icsf.net/images/samudra/pdf/english/issue_81/4398_art_Sam_81_art15_Chile_Salmon_J_C_C_Nez.pdf

No More Blood and Fire

For the first time in Chile, a new type of autonomous social movement, including fishworker organizations, seeks to create a democratic and representative constitution

Three major organizations in Chile have rejected the Social Agenda for Artisanal Fishers that President Sebastián Piñera's government had proposed. (The proposal is called 'Agenda social para los pescadores artesanales' in Spanish.) The three organizations—the Consejo Nacional por la Defensa del Patrimonio Pesquero (Condepp), the Confederación de Federaciones de Pescadores Artesanales de Chile (Confepach), and the Red Nacional de Mujeres de la Pesca Artesanal de Chile—together represent 80 per cent of the artisanal fishers in the South American country.

They said the proposal is characterized by clientalism, neither enabling a move "towards a politically just and socially equitable system," nor creating structural changes in the contested neoliberal political-economy context. Chile is experiencing its worst crisis since the 'imposition of blood and fire' in the mid-1970s under the civic-military dictatorship of General Augusto Pinochet.

of the population due to low salaries, made worse by inadequate social-security systems and privatized pension schemes. Public education and healthcare systems have become even more precarious.

Since November 2019, this new coalition of artisanal fishery organizations have joined the broad social mobilization. Together, they demand the following:

- (a) A democratic process, participative and informed by a constituent assembly, in order to develop a new constitution instead of the current one imposed in 1980 by the civic-military dictatorship.
- (b) The elimination of the corrupt fishery and agriculture laws.
- (c) The establishment of a new social covenant so that the State regains ownership and allocation rights of fishery resources without compensation.
- (d) The State guaranteeing food security and the people's right to nutrition and food, based on sustainable artisanal fishing.

The artisanal fishery organizations, together with a broad coalition of citizens' organizations, demand the annulment of the Fisheries and Aquaculture Law 20.657 of 9 February 2013. The annulment is important for social and environmental justice and to end the corrupt privatization of Chilean fisheries. This law is commonly known as the 'Longueira Fisheries Act', named after Pablo Longueira, the former finance minister and former presidential candidate. He pushed the legislation through parliament between 2011 and 2012, with the help of the large Chilean fishing companies and transnational corporations with headquarters in Japan, Iceland and Spain. Parliamentarians from all political parties backed it, with support also coming from leaders of

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Since 18 October 2019, more than 2 mn citizens have initiated hundreds of peaceful protests on the streets and squares of the country's main cities. They have demonstrated against three decades of lopsided government policies that have concentrated power and wealth in the hands of one per cent of the population, which controls 36 per cent of the national income. This has brought in its wake massive indebtedness and impoverishment

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the two principal Chilean artisanal fishery national confederations at the time.

This collusion enabled parliament to “expressly privatize” the Chilean fisheries, taking them out of democratic and public control. It is alleged that bribes were paid to hand over the ownership of fisheries for free—and in perpetuity—to seven family clans and transnational companies.

This led to seven years of fully tradeable fishing market shares—that can be sold, bought, mortgaged, rented and inherited by its owners. Consequently, 69 per cent of the major Chilean fisheries are in the hands of only four large companies, while 31 per cent of the remaining shares are divided between 97,000 vessel owners of artisanal fishery boats.

This neoliberal twist in policy is driven by exports and extraction. It has overexploited 70 per cent of Chilean fisheries, taking them close to collapse, according to 2018 reports of the Undersecretary of Fisheries (called ‘Subpesca’).

An unpredictable political and social environment now prevails leading up to the referendum called by the Chilean regime on 26 April 2020. The Chilean public has to vote on whether or not it seeks a new constitution. Since November 2019, local cabildos (open forums) and autonomous citizens’ assemblies have been organizing themselves; they have sought the participation of coastal communities, indigenous peoples and dock workers, as also student organizations and feminist groups.

Food security

The immediate demands of the social movement include, first, the annulment of the current fishing and agriculture law; second, the initiation of a participative and informed process in order to elaborate a new sustainable and equitable fishing and agriculture law; third, the restoration of the role of the State as the assigner of access and user rights to national fisheries resources; fourth, the restoration of the rights of small-scale fishers and indigenous communities; and fifth, ensuring that national food security is based on consuming fishery products sourced from domestic sustainable artisanal fisheries.

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San Antonio fishermen protesting against the Longueira law. Its annulment is important for social and environmental justice and an end to the corrupt privatization of Chilean fisheries

This is unprecedented in Chile. A new kind of autonomous social movement is seeking to create a democratic and representative constitution that allows for the establishment of a pluri-nationalist, pluri-cultural, pluri-ethnic republic in which gender equality, decentralization and the recovery of fraudulently privatized natural resources and common goods (water, fish and mineral resources) is guaranteed. The movement hopes the new constitution will explicitly enshrine the rights to education, health, decent work, social security and a clean and healthy environment, as well as grant nature the status of a legal entity, obliging the State to protect and guarantee these rights.

The Chilean social movement recognizes that the severe problems and abuses afflicting with sea, its resources and coastal communities can be addressed only through social mobilization and public pressure. This should be an inherent part of the objective of democratizing the country and changing the prevailing neoliberal economic model. If this does not transpire, the current political, legislative and administrative system, derived from the civic-military dictatorship, would present few opportunities for achieving real and structural changes. 3

For more

<https://pulitzercenter.org/reporting/chile-artisan-fishermen-vs-industrial-fishermen>

Chile: Artisan Fishermen vs. Industrial Fishermen

<http://www.confepach.cl/>
Confederacion Nacional de Federaciones de Pescadores Artesanales de Chile

<http://www.mundoacuicola.cl/new/tag/condepp/>

Critican que consejos zonales de pesca puedan ser consultados para determinar cuota de consumo humano

<https://www.ecoceanos.cl/>
Ecoceanos

Paradise Lost?

The hellish expansion of salmon farming in Chile's Patagonia could threaten a hundred years of Chile-Norway relations

It is said that if there is such a thing as a salmon farming heaven, it is in Norway; whilst if there is a hell, it is in Chile. The South American country displays the worst labour standards globally for this industry. Between July 2013 and January 2019, it killed 31 of its workers. Its sanitary and environmental records are abysmal, with an abusive use of antibiotic and anti-parasite treatments, a mega-crisis of infectious salmon anaemia (ISA) virus, successive noxious and toxic algal blooms, massive dumping of dead fish into the sea and antifouling paints into lakes and rivers, along with the sinking of salmon well-boats, to name but a few of its problems.

King Harald V and Queen Sonja of Norway visited Chile in March 2019 in response to an invitation of the Chilean President, Sebastián Piñera, to commemorate 100 years of diplomatic relations between the countries.

The monarch arrived with a delegation of 60 investors who, along with the Minister of foreign affairs Ine Eriksen Soreide, and fisheries minister Harald T Nesvik, met with a wide range of state sectors, entrepreneurs and

Chile is Norway's second-most important investment market in South America. The 60 companies in Chile make Norway the largest foreign investor in Chilean industrial fisheries and salmon aquaculture.

Together, both countries control 70 per cent of the world's supply of fattened salmon, giving the Norwegian financial system and companies a major role in the current cycle of salmon farming's territorial expansion, designed to achieve annual production levels of 1.2 mn tonnes of salmon by 2032, concentrated in the biodiversity-rich and pristine ecosystems of Chilean Patagonia.

The visit of the Norwegian delegation included the staging of a Chile-Norway business leaders' summit, which featured Alf-Helge Aarskog, the executive director of the ill-reputed transnational company Marine Harvest (recently renamed Mowi), and José Ramón Gutiérrez, executive director of Multiexport Foods, 25 per cent-owned by the Japanese transnational Mitsui. Also in attendance were the directors of the industry umbrella organization, Salmón de Chile, and the executives of its technical branch, the Instituto Tecnológico del Salmón (Intesal).

King Harald V and Queen Sonja's visit to Chile's Patagonian region—formal protocol, scientific and pro-salmon lobbying aspects aside—is of enormous symbolic and strategic value for Norwegian polar interests and policy.

National production

Currently, the vast salmon industry is in the process of active territorial expansion in the Magallanes region, with an exponential growth in production which has risen from 68,000 tonnes in 2016 to 85,000 tonnes in 2018. It is projected to reach 140,000 tonnes in 2014, substantially contributing

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eminent persons from the world of culture. They also visited Punto Arenas and Puerto Williams in the Magallanes and Antarctic regions, where Antarctic and oceanic co-operation agreements were on the agenda, which are key areas of Norwegian geopolitical interest in the Southern hemisphere.

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to the goal of achieving the national production of 1.2 mn tonnes by 2032.

In a synchronized manner, the Norwegian state also seeks to extend and consolidate its presence in the waters of Argentina's Patagonian region, as demonstrated by King Harald V's visit to the Casa Rosada. During this visit, a co-operation agreement was signed by the Agro-industry Ministry with Innovation Norway to carry out a feasibility study over 2018 and 2019 on establishing industrial monoculture of salmon in the Beagle channel and the coast of Santa Cruz, Tierra del Fuego.

The salmo-industrialisation of Patagonia seeks to open up new environmentally and sanitary pristine areas to Norwegian investment, allowing this billion-dollar export-oriented industry undisturbed growth, which, in the case of Chile, will rise above 5 bn dollars annually.

As is widely known, these pristine sanitary conditions are being rapidly degraded in the adjoining Lakes (Los Lagos) and Aysen regions, where intensive salmon operations for 40 years have provoked a series of sanitary, environmental and social crises. Annual production today has reached levels of 800,000 tonnes of salmon, of which 98 per cent is exported.

As is to be expected, these dodgy agreements with Norway for salmon expansion are provoking a wide-scale rejection amongst political and social groups, citizens and environmental organizations, and Kawésqar y Yaganes communities, along with chefs and scientists. Both in Chile and Argentina, these groups are warning about the

potential sanitary and environmental impacts that the massive introduction of these carnivorous species from the Northern hemisphere could have on the pristine waters of South American Patagonia, taking into consideration the four decades of disastrous sanitary and environmental experiences in the Chiloé archipelago.

The process of expanding Norwegian investment in the salmon industry highlights the application of double environmental, sanitary, labour and social standards in Chile. A case in point is Mowi/Marine Harvest, the largest producer and exporter of salmon in the world, which acts as if the South of Chile is the 'Wild West'.

In July 2018, from its fattening centre located in Punta Redonda, 670,000 salmon escaped in the commune of Calbuco. The Chilean Economy Ministry pointed out that Mowi/Marine Harvest is the company with the largest number of salmon escapees in Chilean waters, having registered 50 events over the last eight years, involving a total of 2 mn salmon escaping into vulnerable coastal-marine ecosystems and rivers in the Lakes (Los Lagos) region.

Escaped salmon

In the 2018 escape, Mowi/Marine Harvest violated article 118 of the General Law on Fisheries and Aquaculture by not recapturing 10 per cent of the escaped salmon. In parallel, they asked the artisanal fishers of Puerto Montt to catch illegally the escaped salmon that were in the sea, which also violates the fisheries law.

A citizens' campaign to boycott industrially fattened salmon

Citizens' organizations, and coastal and indigenous communities have launched a campaign for an international boycott of the consumption of chemical salmon from industrial fattening in south Chile. Their aim is to defend life in Chilean seas, rivers, fjords and lakes, and to protect public health in the face of the growing threat of bacterial resistance provoked by the sub-standard practices of the salmon industry.

Chilean citizens welcomed the opportunity provided by the visit of King Harald and Queen Sonja to publicize the citizens' fight against the bad practices and double standards of Norwegian salmon companies in Chile.

They informed international public opinion about the urgent need to monitor and scrutinise the unethical behaviour of the salmon industry, as also to press for halting the destruction of aquatic biodiversity in Patagonia, one of the last pristine regions of the planet, home to the last canoeing Kawésqar and Yaganes communities, survivors of the genocide carried out by the nation states of Chile and Argentina about a century ago.

The campaigners reminded that the Nordic royalty, its citizens and its social movements can no longer remain indifferent to this new process of environmental destruction, genocide and cultural assimilation being pushed by large salmon companies in Patagonia owned by Chilean, Norwegian, Japanese, Canadian, German and Chinese capital.

For details see: www.salmonquimicofuera.cl

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March for the Defense of Water and Territories, Santiago, Chile in April 2019. Citizens' organizations, and coastal and indigenous communities have launched a campaign for an international boycott of the consumption of chemical salmon from industrial fattening in south Chile

What is more, they tried to cheat the Chilean government by providing false documents stemming from the irregular payment of 32 mn pesos to leaders and artisanal fishers, who had lied to a lawyer, swearing that they had undertaken an alleged 'recovery' of fish, amounting to 32,000 individual escaped Atlantic salmon from the areas surrounding the Mowi/Marine Harvest fattening centre.

Following denouncements from the Chilean Fisheries and Aquaculture Service (Sernapesca) and the Chilean Navy, an investigation was carried out by the Environmental Authority (SMA) and charges were made against this Norwegian company for infractions classified as extremely serious, constituting irreparable environmental damage.

In its turn, Nova Austral, one of the main salmon operators in the Magallanes Region, owned by Bain Capital and Altor of Norwegian, Swedish and Finnish origin, is in a process of mergers and acquisitions towards doubling its current production to reach 40,000 tonnes by 2021.

Attention must also be drawn to the two audits carried out by the

Comptroller General of the Republic in 2016 for the Fisheries and Aquaculture Subsecretariat (Subpesca), which showed that between 2013 and 2015, up to 53 per cent of the salmon-fattening centres in Magallanes reported a lack of dissolved oxygen in the water around the perimeters of the of the raft-cages, especially those belonging to the company Nova Austral. This problem arises from the excessive nitrogen and phosphorous levels caused by the very high levels of organic pollution generated by the salmon faeces and uneaten feed that builds up on the seabed.

For more

<https://www.eldesconcierto.cl/2019/03/27/amenazara-la-destructiva-expansion-de-la-industria-salmonera-los-cien-anos-de-relaciones-chileno-noruega/>
¿Amenazará la destructiva expansión de la industria salmonera los cien años de relaciones chileno-noruega?

Chilled Out

Chile's fisheries development model, which follows a neoliberal paradigm, is in danger of triggering a political, environmental and social crisis

Chile borders the southeast Pacific Ocean, one of the five most productive marine areas in the world. The country has 4,200 km of open coastline and 30,000 km of sheltered coastline, consisting of several islands clusters and the Patagonian fjords, next to the subAntarctic region. In addition to this, Chile's territorial seas and exclusive economic zone cover 3.6 mn sq km, five times the size of the country's mainland.

All along this diverse coastline, there are 455 communities where 91,632 small-scale fishermen and women (77 per cent men and 23 per cent women) live and work, engaged in fisheries, aquaculture and

Chile's second largest export, with a production of 895,000 tonnes worth US\$4.361 bn in 2014.

An experimental ground for savage neoliberal policies in the southeast Pacific Ocean

In the last 40 years, Chile has been an experimental ground for neoliberal policies. Eighty-three per cent of the national economy relies on exports of natural resources with low added value, the result of implementing the extraction-export system imposed by the military dictatorship since 1973. Subsequent democratic governments helped deepen and refine this destructive, undemocratic model.

Privatization, sea grabbing and corruption stifle small-scale fisheries

Over four decades, both the military junta and subsequent democratic governments failed in their attempts to privatize small-scale fisheries, due to the strong and cohesive opposition displayed by artisanal fishermen, coastal communities, indigenous peoples and civil society organizations from 1985 to 2012.

In 1998, after a series of failed privatization attempts, Eduardo Frei's Christian Democrat government divided the National Confederation of Small-scale Fishermen (Confederación Nacional de Pescadores Artesanales de Chile, CONAPACH) by creating a parallel organization, the Confederation of Small-scale Fishermen (Confederación de Pescadores Artesanales de Chile, CONFEPACH) that supports free-market policies and agreements with industrial fisheries.

Division in the Movement

The division of the small-scale fisheries movement led to a partial

In the last 40 years, Chile has been an experimental ground for neoliberal policies.

seaweed harvesting, and shellfish gathering, with a total production of 1.5 mn tonnes per year.

Chile is the world's eighth largest fishing nation, with total landings reaching 3.8 mn tonnes per year. Of these, 1.2 mn come from industrial fisheries, 1.5 mn from small-scale fisheries, and 872,000 tonnes from aquaculture.

This South American country is the second largest fishmeal producer, after Peru; the first largest exporter of seaweed for human consumption; the largest producer of farmed trout; and the second largest producer of farmed salmon, after Norway.

Farmed salmonidae (introduced species of carnivorous fish) represent

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privatization of the sector for 10 years by setting up a system of individual, non-transferable fishing quotas, based on “maximum catch limit per vessel owner” (LMCA).

Before the end of the LMCA system, political and business elites, together with CONAPACH and CONFEPACH, entered into a corrupt political agreement under the guise of an “advisory board”, created in 2011, which supported the Parliament to pass a fisheries privatization law that entered into force in 2013. In the framework of this agreement, small-scale vessel owners received, in return, fishing quotas worth US\$34mn, transferred from the industrial sector.

At the present time, the National Office of Economic Crimes has pressed charges of bribery, defrauding of the State, and illegal political funding against 17 fishing companies, two transnational corporations, four associations of fishing companies and 16 members of the Parliament. All of them, including a former small-scale fisheries leader, are currently facing trial in Court.

Chile’s neoliberal fisheries and aquaculture system’s theoretical framework

The privatization process of coastal areas (in 2010) and fisheries (in 2013) is underpinned by a strategic agenda promoted by international financial institutions and multilateral organizations, aimed at imposing Chile’s neoliberal fisheries and aquaculture systems as the model for the future, especially for small-scale fisheries in Latin America and the Caribbean.

The main characteristics of this orthodox model are:

a) removal of the absolute, exclusive and inalienable control of the State over all water resources under its jurisdiction, and of its exclusive competence to grant property rights, access rights and use rights to national fishery resources;

b) transfer of the competence to grant property rights, access rights and use rights to national ecosystems, biodiversity and water resources to market forces;

c) full economic liberalization of fisheries and aquaculture in order to facilitate international and national investments in maritime and coastal territories, inland waters and natural resources, in order to direct production towards meeting international market needs;

d) transformation of biodiversity and natural resources into fully tradeable financial assets and, therefore, subject to stockmarket speculation and economic concentration;

e) full marketability of fishing licences, individual fishing quotas and aquaculture concessions, further facilitating economic concentration and transnationalization of national fisheries and aquaculture;

f) absolute legal certainty ensured for property rights in fisheries and aquaculture through national laws or international free-trade agreements, pre-empting expropriation attempts from the State or recovery by civil society;

g) phasing out of the “small-scale fishermen” professional category and removal of traditional income-distribution modalities and collective and customary rights. The ultimate goal is to eradicate small-scale fishermen as independent producers and turn them into cheap seasonal labour (as they only work a few months in a year).



PATRICIO IGOR MELILLANCA / WWW.ECOCEANOS.CL

Fish vendor, Chile. All along Chile’s diverse coastline, there are 455 communities where small-scale fishermen and fisherwomen live and work

Fisheries privatization's main impact

a) Constitutional rights infringement

Fisheries Law No. 20,657 is the most contested and least legitimate piece of legislation approved in Chile since the end of the military dictatorship in 1990, as it enshrines abuse from political and business elites, and infringes the constitutional principles of economic freedom and non-discrimination, by granting exclusive property rights (a monopoly) over fishing resources to seven big families.

b) Imposition of a fishing system based on a speculative rentier economy

Setting up a system of individual and fully marketable fishing quotas and licences, valid for a period of 20 years and automatically renewed, is the cornerstone of the Fisheries Law.

Fishing licences, individual catch quotas and aquaculture concessions were granted free of charge, in perpetuity and for exclusive use, to a small group of industrial companies. This meant that industrial fisheries companies gained “historical rights” recognition. Incidentally, the law also established restricted and highly precise tendering mechanisms to allocate small fractions of the fishing quotas to specific industrial fisheries.

All this represents a move towards “speculative fisheries”, by putting some distance between the physical reality of aquatic resources and their marketability, turning resources into intangible assets that may be traded in national and international markets, financial systems and stockmarkets.

The application of this neoliberal logic has led to the emergence of a group of small-scale vessel owners operating on a “rentier” basis, selling or leasing their fishing quotas to other small-scale fishermen, industrial fleets and/or processing plants.

c) Overexploitation and collapse

Since the entry into force of Law 20,657 in Chile, fisheries in a status of “collapse”—“overexploitation” has increased from 48 per cent in 2012 to 72 per cent in 2015.

d) Illegal and non-selective fishing increase

As a direct consequence of privatization processes denying right of access to fish to indigenous peoples and to 90 per cent of small-scale fishermen, illegal catches currently exceed legal quotas by 300 per cent and are worth US\$30mn a year.

On the other hand, trawling operations have intensified, as trawlers can legally enter the five-mile area intended to protect biodiversity and small-scale fishing.

e) Racism and infringement of international treaties

In 2011 and 2012, Chile's government and Parliament refused to obtain the mandatory, prior and informed consent from the indigenous peoples potentially affected by the fisheries privatization law, as required by the International Labour Organization (ILO) Convention No. 169, ratified by Chile in 2010.

Law 20,657 denied property, access and use rights to fishery resources to indigenous peoples, taking them out of the picture. It seems paradoxical that Chile has recognized “historical rights” to companies that started operating in its waters 30 or 50 years ago, while denying those very same rights to native communities that have been living in the eastern south Pacific region for 6,000 or 10,000 years.

f) Loss of fishing rights for 90 per cent of small-scale fishermen

Bona fide small-scale fishermen—that is, 90 per cent of all artisanal fishermen—were also denied their rights to access, and use of, fishery resources.

g) Fisheries privatization and food sovereignty

Historically, 90 per cent of artisanal fishing production was destined to domestic consumption. Since privatization started, it has shifted towards export and processing in industrial plants for fishmeal or fresh, frozen, smoked and canned products.

Currently, 35 per cent of the catch goes to direct human consumption, mostly exported to third countries. The remaining 65 per cent is processed into fishmeal and fish oil.



Shellfish divers from the community of Calata Pudeto Bajo in Chile's Los Lagos Region protest against quota allocations. The Los Lagos region produces most of Chile's shellfish (65 per cent)

Only 3 per cent of total fish catches are currently destined to domestic markets. This explains the low fish consumption levels in Chile. Chileans obtain only 7 per cent of their total protein intake from fish, with an average consumption of 6.9 kg of fish per capita per year. This level of consumption is well below world average figures (19.7 kg) and the minimum recommended by the World Health Organization (12 kg).

At the same time, 49 per cent of the country's population is overweight or obese and Chile is the sixth country in the world and the first in Latin America for child obesity.

People's resistance against abuse and corruption in political and business circles

After the adoption of Law 20,657, a civil-society campaign was launched, asking for its repeal and the cancellation of all compensation to fishing business clans—an unprecedented initiative in the political and legislative history of the country.

The campaign is led by a broad coalition of regional social movements, small-scale fishing associations, organized civil society, students and indigenous peoples, who have held days of public protests in eight regions of the country and in the capital, gathering 300,000 signatures in support of the initiative.

In January 2016, the campaign, with the support of 93 per cent of all citizens, managed to introduce a bill in Parliament to overturn the previous fisheries and aquaculture law.

This will be a long struggle against the abuse and corruption of the political, bureaucratic and business elites, and the first steps in the process will be establishing a new balance of power for democratic forces and setting up a Citizens' Assembly that will prepare a new democratic Constitution for the people. 3

For more

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Crises in the South African abalone and Chilean loco fisheries: shared challenges and prospects

A Constant Struggle

Chile's socially and politically troubled waters have provided a rich harvest of organizations in the artisanal fishery sector, as described in a recent book

The history of the social movement in Chile's artisanal fishery and its heritage are the subjects of a recently published book titled *Movimiento Social de Pescadores Artesanales de Chile; Historia y organización de la defensa del mar chileno* ('The Chilean Artisanal Fishers' Social Movement: The Story and Organization of Defending the Chilean Sea'). The book traces the development of the organizational movement from the 1950s up to 2010, highlighting its social and political importance as told through the voices of the men and women fishworkers and supporters who were part of it.

37,768 men. The Artisanal Fishery Register also informs that there are a total of 91,632 registered fishers—21,232 fisherwomen and 70,400 fishermen—highlighting that just over 50 per cent of registered artisanal fishers belong to recognized artisanal fishing organizations. It would also seem that nowhere are fishery activities so diverse—with activities categorized as seaweed harvesting (*algueros*), diving (*buzos*)—mainly for shellfish—vessel owning (*armadores*) or fishing crews (*pescadores*).

This range of activities is reflected in the diversity of organizations that represent these varied and dynamic interests. They include those organized along trade union lines—the *sindicatos*, the associations or guilds (*gremial associations*), the co-operatives and companies (limited liability or joint stock). These, in turn, are associated into regional federations and national confederations. Today at least three organizations purport to represent Chile's highly diverse array of artisanal fishers at the national level: CONAPACH, founded in 1986 as a confederation of *sindicatos*; CONFEPACH, which divided from CONAPACH in 1998 as a confederation of federations; and the Council for the Defence of Chile's Artisanal Fishery Heritage (CONDEPP), which divided from CONAPACH in 2012 as part of a wider protest movement to oppose the privatization of fisheries access.

Landing areas

Artisanal fishermen are also organized at the *caleta* level, the *caleta* being a recognized artisanal fishery landing area, which may include such port infrastructures as wharfs, markets,

Today at least three organizations purport to represent Chile's highly diverse array of artisanal fishers at the national level...

The book describes how the movement became formalized and structured over the last four decades, into local, regional and national-level organizations, actively engaged in fisheries management, in sitting at the negotiating table with the 'traditional enemy'—the industrial sector—and how it has been incorporated into formal policy decision-taking structures, such as the Zonal, Regional and National Fisheries Councils.

Nowhere, it would seem, are artisanal fishers more organized than in Chile. According to the Artisanal Fishery Register compiled by Chile's National Fishery Service, SERNAPESCA, as of 31 December 2014, there are 1,131 artisanal fishery organizations, with 46,521 members—8,753 women and

This article is by **Brian O'Riordan** (briano138531@gmail.com), Secretary, ICSF Brussels Office

ice plants, cold stores and road transport connections. There are 467 officially recognized *caletas* from the Arica and Parinacota Region in the north to the Magallanes Region in the south, including on the Oceanic Islands (Easter Island, Juan Fernandez Islands, and so on). At the local level, fishers also organize themselves into groups to engage in the AMERBs—Management Areas for Benthonic Resources. Under the AMERB scheme, selected groups of fishers are given exclusive access to manage and harvest shellfish and seaweed production in designated areas close to the coast; a kind of territorial user rights fisheries (TURF) which privileges particular groups and excludes others.

The book pays particular homage to one of the movement's charismatic leaders, Humberto Chamorro, whose vision and actions have shaped the artisanal fishing organizations that are today the dominant voices of the sector—CONAPACH and CONFEPACH. Chamorro was instrumental in the birth of both organizations, and he has presided over both. He has also been a leader in his *caleta* (Portales, next to Valparaiso in the V Region) and in the Federation of Artisanal Fishermen in the V Region (FEDEPESCA). Proceeds from sales of the book will go to fund Chamorro's medical expenses in his fight against cancer. Sadly Humberto Chamorro passed away on April 13 2015. He will be remembered as a skilled fisherman and an exceptional leader.

Whilst paying tribute to Chamorro, the book provides a unique overview of the trajectory taken by artisanal fisheries in Chile since the beginnings of the 20th century. It is a rich resource of testimonies provided by some of the key actors and provides insights into how the organs of state evolved in parallel to the movement, how the movement has converged with state and non-state actors to negotiate space and privileges, and notes the key milestones passed along the way, up to the beginning of the current decade.

Describing the origins of the artisanal fishers' movement, the

importance of leaders associated with the communist party in the 1940s and 1950s is underlined. The communist party was declared illegal in 1948 and those associated with it persecuted—often jailed and tortured. Fishermen leaders travelled the entire length of Chile's coast mobilizing fishermen to unite and organize to defend their rights as workers and citizens. Thus were established some of the first autonomous fishworkers' organizations—independent workers unions or *sindicatos*. The efforts of these early leaders gave rise to the first national-level organization in 1965, the Chilean National Federation of Artisanal Fishermen (FENAPARCH). In parallel with these autonomous initiatives efforts, the Chilean state, often with the support of the Catholic church, was also intervening to organize productive sectors, including the fisheries sector, to industrialize and form co-operatives.

Following the military coup in 1973 and the establishment of the dictatorship under General Pinochet, it became difficult and dangerous to organize along trade union lines. "People were gunned down in every *caleta*. It was a time when people feared for their lives", one leader is quoted in the book. Then, in 1979, the junta introduced new rules for setting up artisanal fishing guilds—

PERSONAL ARCHIVE OF HUMBERTO CHAMORRO Y JORGE LOBOS



President Bachelet receiving a copy of the book *Movimiento Social De Pescadores Artesanales De Chile* by Irene Escribano Veloso

known as *gremial associations*—which encouraged producers to organize along small enterprise lines, by providing training and financial support. Encouragement was also provided at gunpoint. In the words of one fisherman: “When the coup came, we found ourselves having to organize our meetings with the rifles and machine guns of the police poking our ribs.”

With the lifting of restrictions in the 1980s, and drawing inspiration from the historic 1984 Rome Conference of Fishworkers and their Supporters which produced the first World Charter on Artisanal Fisheries, artisanal fishers in Chile initiated a reorganization of their sector at the national level. The 10th National Congress of Chilean Artisanal Fishers of 1986 launched the first National Artisanal Fishery Council, CONAPACH. A total of 116 delegates from 74 artisanal fishers’ organizations from the entire country participated, from Arica in the north to Chiloe in the south, uniting 43,600 fishermen from 215 *caletas*.

With the restoration of civil government in 1990, artisanal fishermen were able to organize openly, and their representatives

In 1998, the government proposed to introduce a system of individual transferable quotas (ITQs) as a way to provide stability for the industrial fishery sector.

became actively involved in the drafting and implementation of the 1991 Fisheries Law. The new law defined artisanal fisheries by size of vessel and occupation, and established the coastal strip out to five miles and also declared Chile’s extensive internal waters a conservation zone reserved for artisanal fishery activities. The five-mile zone has become emblematic of the struggle of Chilean artisanal fishworkers to claim their rights.

A whole chapter in the book is devoted to how in January 1996 protests led by Chamorro against the granting of licences to hake trawlers

to fish in the five-mile zone culminated with 2,500 fishworkers converging on the national Congress in Valparaiso, where they symbolically burned *Bote 626*—an artisanal fishing vessel from *caleta* Portales. The protests showed how quickly the movement could act and gather a critical mass. “This demonstration was one of the most important in the artisanal fishworkers’ struggle”, notes one commentator. But it led to deep divisions amongst the leaders and fishworkers, separating those in favour of trawling and those against.

Another chapter in the book is devoted to the emergence of CONFEPACH in the late 1990s. With the advent of democracy, political pressures increased. In 1998, the government proposed to introduce a system of individual transferable quotas (ITQs) as a way to provide stability for the industrial fishery sector. Although it was argued that the ITQs would have no impact on artisanal fishing quotas, a polemic debate ensued, giving rise to differences of opinion and stance amongst the leaders. Some leaders were against the idea of ITQs in principle; others argued that without a strong system for monitoring, control and enforcement, the system would be harmful. The founders of CONFEPACH argued that the former system of management was no longer viable, and fishermen had to move with the times or lose out.

These pressures and differences led to divisions amongst the leaders and their constituents, and a new national confederation was subsequently formed. The original national organization, CONAPACH, took up a contrary stand to the government proposals for introducing ITQs, and the new confederation, CONFEPACH, aligned itself with the government.

Key themes

In the penultimate chapter of the book, entitled “Legacy and Challenges in Future Waters”, the main challenges facing the artisanal fishery are voiced. Several key themes emerge. One fundamental issue is that, in many ways, the struggles of the past bear



Fishermen from Caleta Lo Rojas marching with a banner that says "No to the Longueira Law!". Artisanal fishermen in Chile organized at the *caleta* level

little resemblance to the struggles of today. A different kind of leadership is required. The sector has become increasingly diverse and segmented, with huge inequalities emerging between different actors. The kinds of organizations required and the skills that leaders need have totally changed; organizations and leaders more able to engage in commercial activities, as well as in trade and political negotiations, are required; there is "a need to form strategic alliances with the industry and to negotiate with them. We need good teams, good professionals, and leaders with political vision...". The issue of leadership requirements today, especially the need to train young people to enter the fishery and take on leadership roles, is given great attention.

As the book closes, a new chapter is beginning in Chilean fisheries. It is a chapter which opens with Chilean fish stocks in deep crisis—50 per cent being overexploited or in a state of collapse, and with ever-increasing inequalities in the artisanal fishery sector. Thanks to the five-mile zone and the concentration of sardine and anchovy resources in these waters, a handful of owners of larger artisanal—semi-

industrial—vessels (10 per cent of the artisanal sector), a large part of whose catches end up as salmon feed, are making huge profits. The majority of artisanal fishery workers (90 per cent of the sector)—fishing crews, shellfish divers and seaweed harvesters—have no quota, and struggle to make ends meet.

Artisanal fishery workers also face the challenge of a new Fisheries and Aquaculture Law that was enacted in February 2013, and pushed through the Chilean parliament under express procedures. The law is seen in many quarters as unjust and illegitimate.

National Confederations

In a closed-doors deal brokered by the Economy Minister, signed and sealed in 2011, the two main national confederations, CONAPACH and CONFEPACH, agreed to support the new fisheries law in exchange for receiving fish quotas valued at US\$34 mn annually from the industrial sector. The deal led to a split in CONAPACH and the founding of a new organization, the Council for the Defence of Chile's Fishing Heritage (CONDEPP), which claims to represent about one-third of Chile's artisanal fishermen.

A Beacon Goes Out

Humberto Chamorro Alvarez, a historic leader of Chilean artisanal fishers, passed away on Monday 13 April 2015 after a long struggle against cancer. He is best known as one of the founders of CONAPACH, which became recognized both nationally and internationally as the voice of artisanal fishers in Chile. Born in the Valparaíso Region, he became a fisherman at an early age in the community of Portales. It was there that he showed his leadership skills in the fight to obtain better working and living conditions for Chilean artisanal fishers.

His life, times and heritage are the subject of a recent book, reviewed in this article.

The law extends the ITQ system established for the industrial sector in 2002 for a further 20 years. There are 49 national industrial fishing companies which stand to benefit from these quotas, but 75 per cent of the quotas are concentrated amongst three corporations owned by five families. Companies and politicians associated with the passage of the law through the Chilean parliament are currently subject to corruption investigations. One of the companies named in the case, Corpesca, owned by the Angelini family, holds over 50 per cent of the quota.

The Chilean Fisheries Sub Secretary, Raúl Súnico, referred to the outcome of this process as “a battle that took place two years ago, which resulted in a new fisheries law. This produced some winners, some losers and some who neither lost nor gained.” The losers are the majority of Chile’s fishery workers and indigenous people, including the most marginalized and vulnerable, who were not consulted, and who are not taken account of in the new law.

The people of Chile have also lost out, given that the industrial and, increasingly, the artisanal fishery is mainly export-oriented. Such fish as is available in Chile generally sells for a higher price than pork, chicken or beef. This is reflected in the relatively low annual per capita fish

consumption in Chile, less than seven kg—around nine per cent of the national animal protein consumption.

It is vital that the interests of Chile’s artisanal fishery workers, coastal populations and society at large are given due consideration in a national fisheries policy.

Chile has never had such a fisheries policy; rather, fisheries are governed by the Economy Ministry, and hence environmental and social issues are secondary concerns. Within the framework of such a policy, the implementation of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication, adopted by the Food and Agriculture Organization of the United Nations (FAO), could play an important role in righting the wrongs of Chile’s fisheries.

Achieving this will require strong organizations and able leaders. The lessons of history, as described in this book, show that Chile’s artisanal fishing community has considerable capacity to produce both. The struggle continues. 

For more

pulitzercenter.org/reporting/south-america-chile-south-pacific-fishing-fishermen-decimated-fish-populations-government-controversial-fisheries-law-jack-mackerel-hake-artisan-inequality

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Chile: Artisan Fishermen vs. Industrial Fishermen

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Chile’s indie fishermen say new law favors big business: Part I, Part II, and Part III

Fishing for Answers

A recent study assessed the social and ecological outcomes of government subsidies for small-scale fisheries in Chile

Around the world, small-scale fisheries, because they are often associated with poverty, low levels of income and poor infrastructure, receive substantial support from governmental institutions. Such support may be through specific development programmes, investments in infrastructure, subsidies for vessels

fisheries in Chile offer a useful case study for understanding the relationships between subsidies and production trends. As in many other parts of the world, small-scale fisheries in Chile consist of high-valued resources, and production is, therefore, linked to international markets. Market forces drive the development of small-scale fisheries, stimulating the discovery of resources, developing new markets and influencing prices.

Some subsidies in Chile may be linked to improved management, as in the case of territorial use rights in fisheries (TURFs) in the benthic resources management areas (BRMAs), whose implementation has been greatly subsidized.

Any direct analysis of the influence of subsidies on the number of fishers (or fishing effort) is confounded by a lack of reliable data on the movement dynamics of fishers in and out of fishing-related activities, or along the coast.

Administration

Several instruments and development programmes have been established to deliver these subsidies, which are administered by a number of State institutions such as the Regional Development Fund administered by the regional government offices (the *Regional Intendencias*), the Directorate for Public Works, which has funds for infrastructure, the Fund for Promoting Artisanal Fisheries, the Technical Co-operation Service, the Corporation for Promoting Production, the Solidarity and Social Investment Fund and various private institutions and foundations.

Small-scale fisheries in Chile offer a useful case study for understanding the relationships between subsidies and production trends.

and fish-catching equipment, tax concessions on fuel, income support, and so on.

The provision of such support to the fisheries sector in general is the subject of international debate, sometimes highly polarized and often contentious. In particular, ineffectual management and governance systems tend to be overlooked by those who contend that all subsidies are bad because they promote overfishing and, therefore, ought to be banned. The term 'subsidy' has thus become politically loaded, implying a certain degree of impact on production or trade, which may not necessarily be the case.

In reality, very few empirical studies have explored the outcomes to be expected from subsidies, especially in small-scale fisheries. It is also unclear whether subsidies in small-scale fisheries can have positive outcomes under an effective management regime. Small-scale

This article, by **Brian O’Riordan** (briano@scarlet.be), is based on “An Empirical Analysis of the Social and Ecological Outcomes of State Subsidies for Small-scale Fisheries: A Case Study from Chile” by Carolin I. Mondaca-Schachermayer, Jaime Aburto, Georgina Cundill, Domingo Lancellotti, Carlos Tapia, and Wolfgang Stotz, published in *Ecology and Society* 16(3): 17 2011. (<http://www.ecologyandsociety.org/vol16/iss3/art17/>)

A recent study assessed the social and ecological outcomes of government subsidies for Chile's small-scale fisheries through an analysis of 32 fishing villages, or *caletas*, over a 12-year period (1996-2007) in the Coquimbo Region (Region IV).

A *caleta* is a registered area where fishers land their catches, keep their vessels and gear, and from where they carry out shore-based activities. *Caletas* are also settlements with basic infrastructure, where fishing families live. They may be situated on public or private land. Those situated on private land are legally guaranteed access to fishing grounds. However, no infrastructure, such as piers, can be installed by the government on private land.

The region of the study includes 350 km of Chile's 4,000-km seaboard and is regarded as one of the country's most important small-scale fishery regions. There are 4,809 artisanal fishers in the region who are officially recorded in the artisanal fishery register maintained by SERNAPESCA, the national fisheries service.

Between 1996 and 2007, US\$25.55 mn were spent in the region for over 400 diverse projects and programmes to develop fisheries, improve working conditions of fishermen, and alleviate poverty. The subsidies were distributed for infrastructure and equipment (74 per cent), production (nine per cent), social programmes (15 per cent), research (one per cent) and TURFs (one per cent). The average annual funding of \$2.55 mn represents 48 per cent of the average annual value of regional landings. When considered on a per capita basis, this sum represented 59 per cent of the annual average income of an artisanal fisherman in the region. Additional regional funding initiatives totalled \$9.64 mn during the same period. This funding was targeted at artisanal fishermen but not at specific *caletas*.

According to the study, over three-quarters of the subsidies were spent in just one province, Elqui, where the capital of the region is located. *Caletas* in rural areas received fewer subsidy amounts for

KAROLL VERA



The *caleta* of Guayacán in Coquimbo, Chile. A *caleta* is a registered area where fishers land their catches, keep their vessels and gear, and from where they carry out shore-based activities

port infrastructure than their urban counterparts. The findings showed that subsidies were highest in those *caletas* that recorded the greatest value of landings, and lowest in *caletas* with higher levels of poverty and underdevelopment. Subsidies for roads and schools, and the supply of healthcare, electricity and drinking water, were concentrated in *caletas* closer to urban areas, than in rural areas in dire need of such assistance.

While the subsidies did improve the working conditions of fishermen in *caletas*, they did not have any effect on fish landings. Despite government

The study also disproved the widely held assumption that governments provide subsidies to alleviate poverty and marginality.

The study also disproved the widely held assumption that governments provide subsidies to alleviate poverty and marginality. In this case, funding was skewed towards those *caletas* that reported the highest values of fish, which were landed at centres close to urban areas that are politically important as vote banks. Funds did not go to remote *caletas* in rural areas that suffered from high levels of poverty and underdevelopment.

In conclusion, the study noted that although empirical analyses do not demonstrate the power of subsidies to incentivise greater efficiency in fisheries, “the assumed detrimental effects of subsidies should not be presupposed”. It suggested more empirical study to examine the presumed relationship between subsidies and overexploitation of fishery resources, and to monitor and evaluate the outcomes of subsidies in fisheries. 3

grants amounting to more than half the per capita income of fishermen, *caletas* dependent on seaweeds, for example, showed a decreasing trend in per capita income, while those dependent on fish and giant squid displayed a stable trend.

The study failed to find any meaningful relationship between per capita share of subsidies and per capita income of fishers. It concluded that marine ecological characteristics, rather than subsidies, influenced fish production. It appears that the government financial grants were thus a consequence of, rather than a reason for, the ecological and productive history of fisheries in the region.

The study’s findings thus challenge two assumptions that commonly inform the debate about subsidization in small-scale fisheries: (a) that subsidies are granted to alleviate poverty; and (b) that subsidization will lead to overexploitation and consequent depletion of fishery resources. Also, as the study found out, better working conditions and improved access to fishing grounds and resources need not necessarily translate into incentives for new entrants to move into fishing.

For more



www.ecologyandsociety.org/vol16/iss3/art17/

An Empirical Analysis of the Social and Ecological Outcomes of State Subsidies for Small-Scale Fisheries: A Case Study from Chile

www.oecd-ilibrary.org/agriculture-and-food/an-appraisal-of-the-chilean-fisheries-sector_9789264073951-en

An Appraisal of the Chilean Fisheries Sector

Rebel with a Cause

In this interview, Honorino Angulo, a fishermen leader from southern Chile, talks about his battle for the rights of coastal communities

In March 2012 he was charged with inciting violence. In June, he was bestowed a human-rights award. Meet Honorino Angulo, a fishermen leader from southern Chile, who has long battled the dictatorial measures imposed in the Pinochet era, which still prevail.

In awarding him the Helmut Frenz medal, the Ethical Committee against Torture commended Angulo for his struggle against the privatization of fishery resources and for defending the right of coastal communities to food sovereignty.

Angulo was one of the leaders subjected to the Internal National Security Law, a law created under the Pinochet regime, for leading last summer's people's protest in Patagonian cities, styled as "Aysen, Your Problem is My Problem", which demanded that the valuable natural resources of the southern region be exploited sustainably for the benefit of citizens.

Angulo's response: "I am not a delinquent. I am a social leader and I will continue to demonstrate until I am 100 years old, God willing."

Excerpts from an interview with this feisty leader:

How did you become a fisherman?

I come from a rural (*campesino*) family which arrived in Patagonia to escape poverty in the countryside. In the 1980s I became an artisanal fisherman, despite not having completed primary education. It was only two years ago that I completed basic-level studies. When I started fishing, we caught *congrío* (kingklip, cusk eel), hake, and manta ray, using for bait species native to our region,

such as *pejerrey* (sandsmelt), sardine and *cabrilla* (wreckfish). But since the arrival of salmon aquaculture in the region, we have lost these smallest of resources (*pejerrey* and sardine). Now we have to depend on other regions to get bait. The salmon industry is a major threat to artisanal fishing. Rearing centres have been established in our region and are polluting all the coastal and marine areas. Large amounts of antibiotics and chemicals are administered to the salmon reared in cages, which are now occupying our traditional fishing areas and polluting the sea.

...I am a social leader and I will continue to demonstrate until I am 100 years old...

Three companies in the southern zone—Pescanova, Nippon Suisan and the Chilean company Friosur—own all the quota of some of our fisheries, like the Patagonian grenadier (*merluza de cola*), and southern blue whiting (*merluza tres aletas*) and 50 per cent of the quota for austral hake (*merluza del sur*) and manta ray. The government wants to give them these quotas in perpetuity. They have never been penalized for overexploiting marine resources nor do they pay taxes for extracting these fishery resources. Worse, a large part of the resources are destined for fishmeal production to feed salmon.

Where do your catches go?

Our catches go to feed people in towns in the region and also in other parts of central and northern Chile.

This interview was conducted by **Patricio Igor Melillanca** (patricio@ecoceanos.cl) of Ecoceanos, Chile. It was translated by **Brian O'Riordan** (briano@scarlet.be) of ICSF

A small percentage is exported for human consumption. But almost all the industrial production goes for fishmeal and oil, and a small percentage for the export markets.

How did you become a leader of fishermen?

I have been a leader for 20 years. I took up the struggle of our fishermen to save our resources, and our work and families. We must feed our families; we must never allow the companies to abuse us. Longueira's Law attempts to hand over fishery resources for life to six families of the country, who have become millionaires through fish, but who have also jeopardized the sustainability of the fisheries. Today our organization—the National Council for the Defense of the Artisanal Fishery Heritage—has 50,000 fishermen as members, including various leaders from CONAPACH and CONFEPACH.

You were one of the leaders of the movement “Aysen, Your Problem is My Problem”, which, at the start of the year, made political demands, calling for better infrastructure, and sustainable exploitation and equitable use of resources. Months later, how do you see the situation in Patagonia?

That movement began by rejecting the law for privatizing the fisheries. The fishermen started demonstrating, and then other sectors began to join in with their own demands, which were very similar. The workers' union joined the demonstration, as did public employees, lorry drivers, health and education workers, and rural labourers from the *campesinios*. The movement was able to highlight forgotten issues, like fair salaries, better health and education infrastructure, and subsidies. The demands of artisanal fishers have been overlooked. We would like a new fishing quota system, modified fishery calendars and a region-by-region revision of the law to privatize fisheries resources.

What is the position of the National Council for the Defense of the Artisanal Fishery Heritage on this law, which gives property rights as individual transferable quotas (ITQs)?

We have mobilized throughout Chile against the government's lack of interest in formulating this law exclusively for artisanal fishworkers. At the moment, the bill favours industrial trawling and the operation of large vessels in Patagonia's internal waters and canals. It does not respect the five-mile zone reserved for the artisanal fishery. We emphatically reject the issue of ITQs and the privatization of the fisheries.

How does the human-rights award from the Ethical Commission against Torture link with the artisanal fishers' struggle?

This award recognizes the rights of the individual, and the freedom to feed oneself. As fishers, we want good-quality resources for our country, especially those produced by the artisanal sector. The award recognizes our struggle for food sovereignty, and we are proud to defend the right to food for all our families and our children. This is why we reject Longueira's Law, which seeks to hand over ownership of these resources to six families. Our struggle to defend our fisheries heritage is society-wide. We can't allow the Economy Minister to take this quality food away from us and hand it over to six of his friends, the industrial fishing companies. 3

For more



www.santiagotimes.cl/national/human-rights-a-law/24059-chiles-lower-house-passes-new-fishing-law-amid-protests

Chile's lower house passes new fishing law amid protests

fis.com/fis/worldnews/worldnews.asp?monthyear=6-2012&day=28&id=53386&l=e&country=&special=&ndb=1&df=1

Chile's fisheries Act contents presented

Guiding Small-scale Fisheries

A set of international voluntary guidelines is being planned to address both inland and marine small-scale fisheries in developing countries

The Twenty-ninth Session of the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO), held in Rome in early 2011, agreed on the important role played by the small-scale fisheries sector and decided to give it high priority and adequate visibility. The Committee approved the development of a new international instrument on small-scale fisheries. A set of international voluntary guidelines that would draw on relevant existing instruments complementing the Code of Conduct for Responsible Fisheries, to address both inland and marine small-scale fisheries in developing countries, will be developed. This is to be done with the involvement of all stakeholders. The FAO Council subsequently lent support to COFI by including the work on small-scale fisheries in the Programme of Work and Budget (PWB) for the year 2012-13.

The workshop-cum-symposium on sustainable small-scale fisheries, organized by the National Fishworkers' Forum (NFF), India, in collaboration with ICSF, and held at Kolkata in September 2011 (see "A Bottom-up, Pro-fisher Policy", page 42), was intended to contribute to the process of developing the proposed FAO guidelines. Drawing participants from a range of fisheries—marine, estuarine, lagoon, riverine, lake, tank and pond fisheries—the meeting illustrated the heterogeneity, diversity and complexity of Indian small-scale fisheries. It provided an opportunity to understand the status of inland and marine fisheries in the context of food security and poverty alleviation. It highlighted good practices in small-scale fisheries management and development, and in welfare and social-security measures; it also identified gaps that need urgent attention.

The Kolkata meeting revealed how the fisheries sector receives the lowest priority in comparison with forestry, agriculture and industry, and how the legitimate livelihood interests of fishers and fishing communities are often overlooked in inter-sector conflicts over land and water resources. Fishing community representatives who spoke at the meeting sought protection of their fundamental right to life and

livelihood, and their right to be treated with dignity. More than anything else, the meeting underscored the importance of adopting a rights based approach to development in the case of vulnerable fishing communities, and the need for developing guidelines on securing sustainable small-scale fisheries within a pro-poor, human-rights and ecosystem-based framework. A significant outcome of the meeting was the clarification of the term 'small-scale fisheries' in the Indian context.

At least nine similar meetings are scheduled to be held under the auspices of civil society organizations such as the World Forum of Fisher Peoples (WFFP) and the World Forum of Fish Harvesters and Fishworkers (WFF) during the next three months to contribute to the guidelines process. These are to be held in Sri Lanka, Pakistan, Thailand, Senegal, South Africa, Uganda, Brazil, Honduras and Costa Rica. The Senegal meeting will have participants from 12 countries in west Africa.



These meetings, as in the case of the Kolkata workshop and symposium, are meant to contribute to clarifying small-scale fisheries in different parts of the world, to document good practices in small-scale fisheries, and to identify threats facing small-scale fisheries and fishing communities. They are expected to improve the visibility of small-scale fisheries at the regional, national and local levels, to open up channels of communication between the State and civil society organizations, and to influence government positions on the proposed guidelines during the FAO technical consultation in mid-2012.

This is the first time that several meetings are being organized under the auspices of civil society organizations in preparation for a proposed FAO fishery instrument. These meetings and their pertinent outcomes should be seen by the FAO Member States and the Secretariat as an opportunity to benefit from a bottom-up process to develop meaningful, voluntary guidelines on securing sustainable small-scale fisheries, to complement the Code of Conduct for Responsible Fisheries. They should also be seen as a promising beginning to broadening the participation of civil society organizations in the fisheries work of FAO. 3

Defending the Sea

Indigenous people in the Chilean coastal community of Mehuin are fighting against corruption, private property and corporate interests

Mehuin, a coastal fishing port and resort town in southern Chile, is located at the mouth of Lingue river in the the province of Valdivia of the Los Rios Region. The territory is shared between Chilean inhabitants and the Mapuche Lafkenche community. Local people partly live off fisheries activities of extraction and cultivation of

one side, we have the interpretation of big business and one segment of the artisanal fishermen who claim historic property rights over the exploitation of marine resources. On the other are the claims of the Mapuche Lafkenche to customary rights to the ownership, use and cohabitation with marine resources—that is, over everything that comprises the coastal marine territory. These two positions are based on arguments found in national laws such as the Fishery Law, as used by the artisanal fishermen and big business, and the Lafkenche Law, as interpreted by the Mapuche Lafkenche communities.

However, although the presence of artisanal fishermen may be historic, they were not the first users of the sea from a resource management perspective. The accounts sent to the authorities, which relate to the process of submitting requests from the indigenous communities for coastal marine areas, within the framework of the Lafkenche Law, show that the communities have been using the resources and coastal marine areas for hundreds of years. These indigenous coastal communities have made rational use of resources rooted in the relationship between coastal communities and nature, as well as links with other indigenous communities from the interior.

Historic users

Hence it's not right to say that the artisanal fishermen are the first of historic users of the sea. I am a fisherman, but I must tell the truth, I can't hide it: the communities, the indigenous people were the first, then came artisanal fishermen.

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...indigenous coastal communities have made rational use of resources rooted in the relationship between coastal communities and nature...

molluscs, and harvesting seaweed. Subsistence agriculture, barter with other indigenous territories and communities, and tourism are the other main livelihood activities carried out by most of the Mapuche Lafkenche people.

A rich marine diversity thrives in the area as a result of the nutrients available in the large estuary of the Lingue river, whose huge tidal fluctuations ensure productivity. The area's resources are not only exploited by artisanal fishers and the Lafkenche communities, but also by the fleet of artisanal purse-seiners of the los Rios region and the vessels of the large industrial fishing fleet that violate the fishing zones, and take valuable pelagic and demersal resources.

In recent years, the community of Mehuin have had to deal with differing interpretations of how property rights apply both to resources and to marine areas. On

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The Lafkenche Law 20.249 has included aspects of rights that apply to the coastal zone, the resources, and exchange between coastal and land-locked communities. The Law considers the establishment of the coastal space for indigenous communities who must also demonstrate that they have had use of the resources. They must first establish that fact, following which comes the next stage of the management plan. They must establish that not only are they the title holders, but also users who can access this space. The users may not only be the indigenous communities, but also the artisanal fishermen and others, such as communities from the interior, who come only at certain times to the coast to gather shellfish, seaweed or to fish from the shore.

The Law says that coastal marine spaces can be established in areas where no demarcated spaces have been established legally previously. In order to establish a coastal marine space for indigenous communities, they must send in a request with a geographical plan (“geo plan”) certified by the competent authorities (Subpesca), who will review whether there is any other legal claimant to the area concerned.

Following this, the authority sends a proposal for the coastal space, which must be outside any other space that is already legally established, such as management areas or aquaculture or beach concessions that have already been legally established. Various highly unreasonable interpretations have arisen, for example, that the law deprives an artisanal fishing sector of the right to work. Such a view is divorced from the reality of the law, whose spirit is strictly for the protection of natural resources.

In the Los Rios Region various threats have arisen from the different interests at play. First of all, artisanal fishing was so entrenched that the Lafkenche Law could not be applied, given that areas existed where the semi-industrial fleet catching sardines and anchoveta was operating. Besides,

the Valdivia river is a vast area for salmon farming, where around 19 salmon concessions have been approved.

In the Mehuin zone there is another source of damage—a 35-km discharge pipe for industrial wastes from a cellulose plant. The Celulosa Aracuco Company (CELCO), which is part of the Angelini business group with investments in forestry, energy, mining and fisheries, does not wish to use the sea for tourism, but simply as a dumpsite for its wastes.

All this makes it difficult to establish a coastal marine space for the indigenous people of the Los Rios Region. The policy of the government is geared towards benefitting companies and large conglomerates. The organs of the State—the Marine Subsecretariat and the Fisheries Subsecretariat—are restricting the applicability of the Lafkenche Law. They have left out of purview of the Law, rivers and lakes navigable by vessels of over 100 gross registered tonnage (GRT), including in the Lingue river. This contravenes the provisions of the Law, which stipulates coastal marine spaces as assets and maritime concessions for indigenous communities. The Lafkenche Law can be interpreted to mean that coastal marine spaces for indigenous communities will be determined by

PATRICIO IGOR MELILLANCA



Fishing boats in Queule creek, Chile. Local people partly live off fisheries activities of extraction and cultivation of molluscs, and harvesting seaweed

the area necessary to ensure the exercise of the customary use rights of indigenous people.

It is also possible to interpret the Law to change the meaning of customary rights and move towards private property rights. This is happening in the form of transforming these spaces into concessions or areas that can be mortgaged. There are examples of this taking place in salmon farming, where the law has been changed to allow for the owners of these aquatic concessions, which are national assets for public use, to be able to mortgage them as guarantees against credit from the banks. This can be made to happen under this Law or under the Fisheries Law.

One segment of the artisanal fishery has sided with such destructive corporate behaviour, which seeks to modify the legal framework in place. The links between a fisheries association in Mehuin, the Ferepa Federation of BioBio, with CELCO, are designed to transform the maritime

zones into chemical waste dumps, in exchange for vast sums of money.

However, the leaders of the Sea Defense Front in Mehuin were very alert and knowledgeable about the law. They could check one of the syndicates that was operating in cahoots with CELCO, and succeeded in keeping the management area open.

Banks are also pushing for marine areas and fishery resources to be transformed into cash-generating, transferable assets. Once transferability comes into force, user rights to areas and resources will be undermined.

Government functionaries in the Araucania Region have proposed that the coastal strip be established as an "AAA" (Area Apt for Aquaculture), which aims to privatize the sea in the shape of concessions, which are transferable and can be mortgaged. Meanwhile, the genuine artisanal fishermen and the Mapuch Lafkenche communities have remained vigilant to ensure that the management areas continue to be used for the purpose for which they were established.

In the 1990s CELCO began to obtain the various permits for construction of the waste duct. The Navy turned a blind eye to this development, and refused to give us answers to queries on the studies being made, the vessels used, their crew and professional expertise. Despite our questions, the Environmental Impact Assessment was taken forward on the basis of false data. Worst of all, our community was brutally split by a company, in connivance with the government and through threats of violence, which turned our own comrades against us.

Human rights

We have brought all of this to the notice of the InterAmerican Commission for Human Rights, pointing out that the passage of the waste duct, especially in and around Puringue, takes it through the middle of a Mapuche cemetery and through a place where Nguillatunes, the main ceremony of the Mapuche people, is celebrated. This is a clear transgression of the cultural and

PATRICIO IGOR MELILLANCA



Boris Hualme Milano, spokesperson for the Marine Defence Committee. Artisanal fishermen of Mapuch Lafkenche remain vigilant to protect their rights



Mapuche ceremony on Mehuin beach. Indigenous communities have been using the resources and coastal marine areas for hundreds of years

human rights of indigenous communities as enshrined in the International Labour Organization (ILO) Convention 169, which dates to 1989 and deals specifically with the human rights of indigenous peoples.

What is more, these communities and all those who defended the coastal maritime territory were never consulted about the CELCO project as is obligatory under articles 6 and 7 of the ILO Convention 169. Once we had exhausted all the possibilities of appealing to the Chilean State, we had no option but to approach the InterAmerican Commission for Human Rights.

Despite over 15 years of vociferous opposition to the damaging project, and the appeal to the InterAmerican Commission on Human Rights, CELCO continues in its bid to install the waste duct, by also co-opting the artisanal fishermen of Mehuin. The company is also applying pressure on the organs of the State not to implement the Lafkenche Law that guarantees coastal marine areas for the indigenous people.

Yet, despite everything, the defence of the sea must be viewed from the perspective of those indigenous communities who live by

the sea. Even as corporate interests seek to undermine the law, we, as indigenous communities, continue to push forward, defending the sea. ♣

For more



www.noalducto.com/

No al ducto de Celco en Mehuin

www.mehuin-celco.blogspot.com/

Mehuín en Pie de Guerre

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Fishing Villages Turn to Int'l Justice in Fight against Waste Duct

Tsunami Recovery

The tsunami that hit the Juan Fernández islands of Chile has tested the resilience of the traditional tenure system of the fishing community of the area

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Some time in October 1704, the 16-gun buccaneer galleon *Cinque Ports* reached the uninhabited Más a Tierra Island, about 415 miles off central Chile, for restocking food and fresh water. There, sailing master Alexander Selkirk got into an argument with Captain Thomas Stradling about the seaworthiness of the vessel. Selkirk, an ill-tempered Scot, was left on the island with a musket, gunpowder, carpenter's tools, a knife, a Bible, some clothing and rope. He was rescued four years and four months later; his story inspired Daniel Defoe's fictional

spreading over approximately 230 miles in the east-west direction. The rough landscape of the islands, of imposing beauty, consists of a mosaic of volcanic rock ridges and densely vegetated ravines, harbouring a rich endemic flora. The islands were designated by Chile as a National Park in 1935, and by the United Nations Educational Scientific and Cultural Organization (UNESCO) as a World Biosphere Reserve in 1977, making them part of humanity's natural heritage. San Juan Bautista (population approximately 770), the only permanent settlement, is located on Cumberland Bay, facing northwards on the north coast of Robinson Island.

Most fishing activity takes place around Robinson Crusoe and Santa Clara islands. Eight to ten boats operate in Selkirk, where fishers stay with their families between late September and mid-May, while a few fishermen operate sporadically in the Desventuradas. The basic design of the 8-11-m double-ended fishing boats has been virtually unchanged since at least 1915 and may be traced to whaling during the 19th century. Most were built in Robinson Crusoe Island with local woods and are powered by 15-hp outboard motors. Traps are made of wood, and baited with a mix of white fish and moraine eel meat.

Modern fishery

Commercial fishing dates to the 19th century. The modern fishery took shape after a French company started to operate in 1914, largely as a result of the introduction of motors. Before 1959, fishermen were employed by the fishing companies (*apatronados*).

... the plentiful lobster stocks became the backbone of the economy of the island, or, more precisely, of the Juan Fernández archipelago.

character Robinson Crusoe. During his long period of isolation, Selkirk learned to make use of whatever resources were available to him—digging for roots, hunting feral goats and boiling lobsters.

Two centuries later, the plentiful lobster stocks became the backbone of the economy of the island, or, more precisely, of the Juan Fernández archipelago. Más a Tierra and Más Afuera (located 100 miles further offshore) were renamed as Robinson Crusoe and Alexander Selkirk Islands, honouring, respectively, the fictional character and his real-life counterpart. The islands correspond to the peaks of two members of an impressive chain of sea mounts that rises from abyssal depths in the southeastern Pacific,

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The last *apatronados* subsisted through approximately 1970; since then, all fishermen have worked independently.

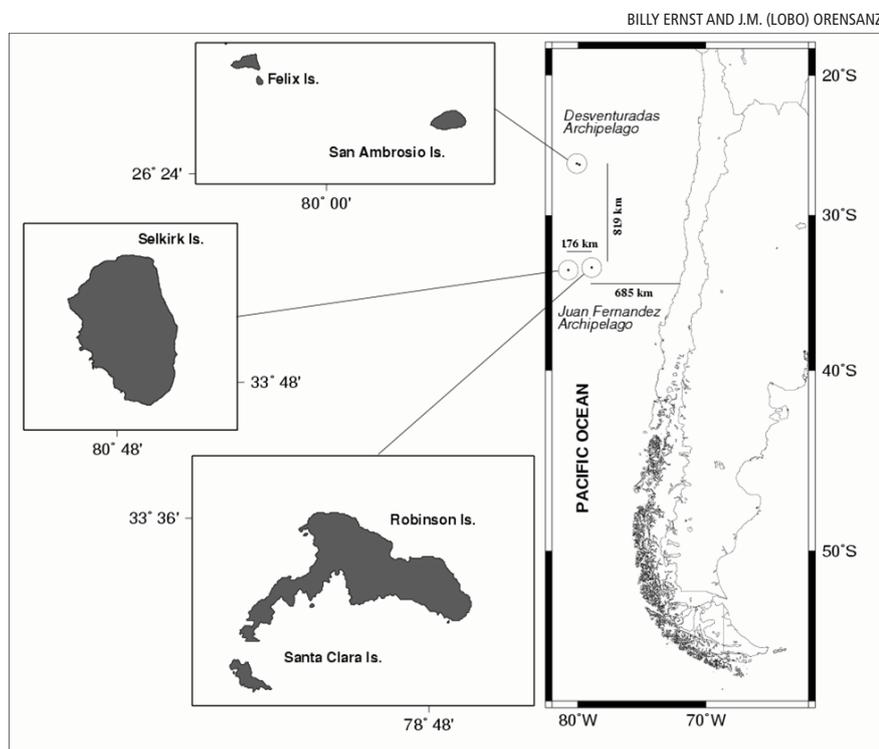
The first two vessels built to be owned by independent fishers were significantly named *Libertad* and *Independencia*.

A co-operative was created in 1964, with a membership that included about 90 per cent of the fishers, but it foundered eight years later and was formally terminated in 1980, as a result of administrative mismanagement and a political climate unfriendly to co-operatives. As Chile returned to democracy, fishermen organized themselves into 'syndicates', but remained economically dependent

with the aim of increasing and stabilizing prices by entering European markets directly.

Nominally, the fishery has been managed by a centralized administration of regulations that cover legal size, a closed season and the release of egg-carrying females. Yet, as Antonie de Saint-Exupery wrote in *The Little Prince*, "the essential is invisible to the eye": an effective but unwritten sea-tenure system, established by tradition, has put a cap on the size of the fishing force, and regulated access for decades, even in the absence of a formal limited-entry regime or other access controls.

Each fisherman or fisherman's family member may 'own' a certain



Archipelago of Juan Fernández islands, off central Chile.
Lobster stocks are the backbone of the economy of these islands

on middlemen who provide cash advances and an assortment of supplies before the start of the fishing season. In 1999, a group of fishermen started a small private venture with support from a government agency and non-governmental organizations (NGOs), with the purpose of facilitating marketing and circumventing intermediaries. In recent years, the main syndicate started its own marketing of lobsters through exports,

number of fishing spots, known as *marcas*, where lobster traps are deployed, one per spot. Most of those spots have been discovered and claimed over decades, although new ones are still being identified with the help of technological aids like echo sounders. *Marcas* are identified by alignments of land features; each fisherman knows by heart the location of his *marcas*, and of those belonging to others. Use and transfer of rights

over *marcas* are regulated by informal, but well-established, internal rules. *Marcas* are not sold but can be transferred with a boat if the latter is sold; they can be inherited by family members, and are often lent to other users under a variety of arrangements. In the event of a fisherman being unable to harvest in his *marcas*, others are expected to do so, but the *marcas* return to the 'owner' once he goes back to fishing. This complex and highly structured traditional tenure system enjoys high compliance.

As part of a project initiated by the Juan Fernández syndicate, we mapped the location of all *marcas* around the islands with global positioning systems (GPS), and recorded their 'owners'. The total number of *marcas* identified near the Robinson Crusoe and Santa Clara Islands was 3,762.

While the *marcas*' tenure system has been completely ignored by the administration until very recently, scientific input to agency managers has consisted of discontinuous stock assessments projects and equilibrium models leading to total allowable catch (TAC) recommendations. Introduction of a TAC, however, would require the transition from an informal but tightly structured territorial tenure system to some form of quota allocation, likely to be socially disruptive.

Seeing the need for improved advice, the Juan Fernández syndicate acted to develop its own indicators of

from the bottom up. A collaborative effort between the syndicate and independent scientists, taking advantage of technical skills available within the fishing community and with the support of conservation-oriented NGOs, led to the design and implementation of a cost-effective logbook sampling programme. The indicators monitored, together with the empowerment of the fishermen's organization, gained through implementation of the process, are expected to lead to management strategies based on simple decision rules.

Early in the morning of 27 February 2010, the orderly and almost idyllic life of Robinson Crusoe Island and its fishing community came to an end. A train of three tsunami waves, 12-15 m high, hit Cumberland Bay. The exposed sectors of San Juan Bautista were devastated. Flooding progressed horizontally over approximately 300 m, reaching a maximum height of 20 m. The tsunami led to 16 fatal casualties, nearly 50 families were affected, and serious damage to the infrastructure of the community occurred: the municipal hall, the post office, the coast guard detachment, a gymnasium, the parks service office, the cemetery, churches, sport clubs, the museum and library, the geriatric home and communications equipment were completely destroyed. It was almost miraculous that the tsunami did not hit the temporary fishing village of Selkirk Island, 100 miles westward. The waves passed south of the island. Had the tsunami struck the island, the consequences might have been devastating, as the houses there are built near the beach, at the foot of a deep gorge.

An assessment of damage to the fishing infrastructure and fleet in the aftermath of the disaster revealed that the two fishing coves (in the north and south) had been damaged. Sheds and winches used to beach the boats were totally destroyed. The facilities of the fishers' association, built with great effort and pride, were completely wiped out. Gone were the office building, the showroom for display of marine products, and the 50 lockers where

....the Juan Fernández syndicate acted to develop its own indicators of stock status and fishery performance.

stock status and fishery performance. Fishermen perceive stock abundance through catch per trap haul or per fishing trip, so some form of catch per unit effort (CPUE) would be a natural indicator, one which fishermen can monitor themselves, and understand. Monitoring and analysis require a format for the provision of scientific or technical advice that operates

The Honour of *Marcas*

Julio Chamorro, a member of the Juan Fernández syndicate and the son of a local island boatbuilder, responded via email to questions put by Ramya Rajagopalan of ICSF, and translated by Billy Ernst:

Could you tell us something about the origins of the *marcas* system?

Marcas were established during the onset of the lobster fishery in Juan Fernández archipelago around 1893. During the early years, the fishery operated in shallow inshore waters using baskets; each boat had its own delimited fishing area. Later on, the fishing expanded progressively to deeper areas, and traps were introduced. The best fishing spots to fish for lobster are rocky outcrops or small shallow reefs. These were located by setting adrift a buoy, line and weight rig; once a reef was hit, fishers recorded the spot using landmarks and leading lines.

How has the syndicate developed its own indicators for the lobster fishery?

In October 2006, at the beginning of the 2006-2007 lobster season, the Syndicate of Independent Workers Artisanal Fishermen of the Juan Fernández Archipelago (STIPA-JF), in collaboration with the University of Concepción, started to implement a monitoring programme for the fishery. Fishermen themselves systematically collected basic information on catch and effort, which was used to estimate how much effort was exerted, as well as where and when the lobsters were being caught. This continuing exercise allows for a detailed temporal and spatial analysis of catch per unit effort (CPUE).

How are fishers involved in the monitoring?

Fishermen are committed to collaborate in the collection of basic fisheries data, primarily through logbooks in which are recorded information on the total catch of commercial and non-commercial lobsters in each trap hauled, and the estimated total weight of the bait. The objective is to improve the quality of basic fisheries information, and also to follow up on previous projects like the survey of *marcas* conducted during the 2004-05 and 2005-06 seasons.

Are these indicators recognized by scientific and formal management institutes?

The indicators have been analyzed at the end of each fishing season by the Department of Oceanography of the University of Concepción. For the last four seasons the programme has produced CPUE estimates by statistical areas. Since the 2006-07 season the results have been recognized by the Undersecretariat of Fisheries and by the National Fisheries Service. We have since worked together with the National Fisheries Service by providing fisheries data. But these data have not yet supported formal management regulations.

Do *marcas* have a legal status in Chilean fisheries legislation?

No. The *marcas* system does not have legal status, nor is it formally accepted by the Chilean central fisheries authority. The system is used only in the Juan Fernández lobster fishery, and is broadly respected. Ownership of *marcas* is honoured even after the prolonged absence of a fisherman from the archipelago. To give one example: Hugo Gonzales, a fisherman who moved to the continent and returned 40 years later, fishes today using his old *marcas*.

fishermen kept their gear and supplies. The spacious and neatly kept workshop of the boatbuilder was totally destroyed. Out of the 41 boats that operate in Robinson Crusoe Island, eight were completely lost and 11 damaged; one-

third of the outboard motors were lost. The loss of boats, gear and equipment amounted to around half a million United States (US) dollars.

Fifty minutes before the tsunami hit Robinson Crusoe Island, central

Chile had been shaken by an 8.8-magnitude earthquake that generated waves that hit approximately 550 km of the continental Chilean coastline with great intensity. Warning systems did not work (see “Seismic Shock” by Brian O’Riordan in *SAMUDRA Report* No. 55, March 2010). When the tsunami hit the island, before 5 a.m., most of the islanders were still sleeping. Unusual bobbing of the boats in the bay—the first sign of the impending disaster—went ignored. Then Martina Maturana, the 12-year old daughter of a police officer, heard about the earthquake from her grandfather on the mainland. She ran down to the town plaza and rang the emergency bell, providing warning to some of the island’s residents.

The tsunami’s death toll in continental Chile was proportionally much smaller than in Juan Fernández, apparently because of the long experience of artisanal fishers with earthquakes and their consequences. Tsunamis had hit the Juan Fernández islands earlier—on 25 May 1751, when 35 persons (including the Spanish governor) died, and on 20 February 1835. Yet, the frequency of tsunamis has been too low to produce a preparedness for natural hazards among the islanders.

The fishery started to recover remarkably soon after the tsunami hit Robinson Crusoe Island. The syndicates began discussions with the central fisheries administration, and resumption of fishing operations, announced by the governor on 13 March (just two weeks after the tsunami), became effective by the end of that month. Fishermen shared boats and motors to compensate for lost equipment, and fishers with operating boats checked the traps left unattended by relatives who had lost their gear. The Selkirk Island teams returned to Robinson Crusoe Island to help in the recovery. Initiation of the 2010-2011 season fishing was advanced by one month to compensate for the fishing days lost after the tsunami, specially in Selkirk Island. The traditional tenure system survived intact, and was clearly a determinant factor in the orderly resumption of fishing operations.

Solidarity from external sources was remarkable. The Food and Agriculture Organization of the United Nations (FAO) contributed with the acquisition of eight new boats. Four of them were built with laminated wood, in the traditional design of the archipelago, thus merging technological innovation with cultural identity. The North Pacific fishing industry raised US\$85,000, which were used to replace lost fishing gear and supplies such as outboard motors, winches, batteries, buoys, lines, radios and raincoats. The Robinson Crusoe Lobster Fishery Relief Fund, started by a conservation biologist, brought in money to reconstruct the two winch houses needed to harbour the powerful winches donated by the Alaska crabbers. There is an initiative to rebuild the headquarters of the main syndicate with financial assistance from the Slow Food Foundation. The Japanese company Honda donated 15 outboard motors, while the Japan International Co-operation Agency (JICA) has offered US\$100,000 to rebuild 50 gear lockers.

The resilience of the fishery to the unpredictable natural disaster was a result of several factors: most of the members of the tightly knit local community belong to fishermen families; fishers are well organized; and the unwritten rules of the traditional tenure system helped the orderly return to fishing activity.

The case of Juan Fernández offers some important lessons. While a centralized warning system proved dysfunctional, the community was effective in emergency response: assessment of impact and immediate needs, reconstruction, and sustainable recovery.

For more

en.wikipedia.org/wiki/Juan_Fern%C3%A1ndez_Islands

Juan Fernández Islands

www.oikonos.org/fishing.htm

Juan Fernández Islands Conservancy

www.slowfood.com/slowfish/pagine/eng/pagina.lasso?-id_pg=117

Slow Food

Seismic Shock

The Chilean State's ineffective response to the recent earthquake and tsunami reveals a systemic failure and is a wakeup call for a more effective warning system

On 27 February at 3.34 a.m. local time, the central southern region of Chile was shaken by a powerful, magnitude 8.8 earthquake. The epicentre of the earthquake was offshore, at a depth of about 22 miles, some 70 miles from Concepción, Chile's second largest city, with a population of around 670,000. At 3.52 a.m., the first of three tidal waves was produced. Roughly one hour after the third and final wave came in at 6.32 a.m., the Sub-secretary of the Interior rejected the possibility of a tsunami.

It was thanks to long experience with earthquakes that the death toll in Chile was not much higher. In May

to a coastal strip of around 700 km between San Antonio and Valdivia.”

In a preliminary census carried out with information from different radio stations, local papers, Facebook, Twitter and communications from non-governmental organizations (NGOs) and coastal communities, *Ecoceanos News* made a preliminary estimate that “between San Antonio and the mouth of the river Rapel, in the south of Valparaíso Region (Region V), the *caletas* (settlements) have suffered subsidence, and a large number of artisanal fishing vessels have overturned, and landing areas and godowns destroyed. In addition, there is damage to port infrastructure and commercial activity linked to tourism. A similar situation exists from Port Saavedra, Araucanía Region, up to Corral, in the Rivers (Los Ríos) Region.”

Ecoceanos News reported that around 100 artisanal fishing *caletas* have been totally destroyed, while another 70 or so have had serious damage inflicted on their infrastructure, vessels, homes and citizens. Boats and fishing gear, port infrastructure, refrigeration, drinking water systems and power, public buildings, schools, hospitals, and warehouses and roads are unusable. In places that were less affected, security and operating conditions are nonetheless precarious.

Geographical changes

It is estimated that the impacts of the earthquake and tsunami on the economy of Chilean coastal and artisanal fishing communities could last at least two years, as the tidal waves have changed the geography of various coastal areas.

It is estimated that the impacts of the earthquake and tsunami on the economy of Chilean coastal and artisanal fishing communities could last at least two years...

1960, the largest earthquake ever recorded, measuring 9.5 on the Richter scale, hit southern Chile. The effects of this and the resulting tsunami killed 1,655 people and left around 2mn people homeless. A less powerful earthquake in 1985 also caused extensive damage in central Chile.

The earthquake and tsunami mainly affected six of Chile's 15 Regions, from the O'Higgins Region VI to the Araucanía Region XI, where, according to *Ecoceanos News*, “...the destruction of fishing and small-scale subsistence communities, including seaweed and shellfish gatherers, is almost total. In the Valparaíso and Lakes (Los Lagos) Regions, there is serious destruction. This relates

This article has been compiled by Brian O'Riordan (briano@scarlet.be) from various sources

The National Confederation of Chilean Artisanal Fishermen (CONAPACH) estimates that 123 *caletas* in six Regions were affected, and some 2,700 vessels destroyed, directly affecting the productive activities of 26,000 fishers and their families, and completely destroying the seaweed harvests stored on the beaches.

An article written by several authors from Chile's Tsunami Warning Centre describes the official response to the earthquake as a catalogue of "errors, lack of concern, ineffectiveness and irresponsible behaviour." The article says: "Only six minutes after it was known that the epicentre of the earthquake was some 90 km to the northeast of the city of Concepcion (out in the Pacific Ocean), the Hydrographic and Oceanographic Service of the Chilean Navy (SHOA), the organization in charge of equipment to evaluate whether or not a tidal wave has been produced, did not function, did not provide any advice, and failed to follow established protocol. The other State body, the National Emergency Office (ONEMI), continued to broadcast that there was no tidal wave".

The failure of the navy was despite a warning being given by the United States Pacific Tsunami Warning Centre (PTWC) in Hawaii, which at 3.46 a.m. alerted SHOA that "... an earthquake of this size has the potential to generate a destructive tsunami that could hit the coasts near the epicentre. The authority should take appropriate action in respect of this possibility." However, the sailor on watch spoke no English. Two minutes later, a scientist at the PTWC, Victor Sardiña, warned SHOA in Spanish that they should put out information and warn the rest of the countries in the Pacific. One hour later, the same scientist warned SHOA that "sea level readings indicate that a tidal wave has been produced" and that they should warn countries in the South Pacific.

Carmen Fernández, Director of ONEMI, emphasized that officials in her organization had been clearly informed by SHOA on three occasions that there was no possibility of a tidal wave. "There was such a degree of imprecision

and ambiguity that no one was able to take a decision, and, on the technical side, there was not even any possibility of doing anything because there was no system (of communication) available to alert people in time for them to escape.... In my personal capacity (as a witness), I can say that those listening to the radio here or at home would have heard the SHOA operator state three times that there was no possibility of a tsunami."

The National Confederation of Chilean Artisanal Fishermen (CONAPACH) estimates that 123 *caletas* in six Regions were affected, and some 2,700 vessels destroyed, directly affecting the productive activities of 26,000 fishers and their families...

On 10 March, Carmen Fernández resigned her post, admitting that she was slow to respond to the earthquake. She was the third senior official to step down as a result of the quake. Earlier, the head of SHOA, Marino Rojas Busos, was fired, and the Junior Interior Minister, Patricio Rosende, resigned.

The State Prosecutor, Sebastian Chaguan, responsible for investigating if criminal charges should be brought against the authorities who neglected to provide a tsunami warning, stated that: "this could have saved lives".



Pichilemu beach, O'Higgins Region, Chile. Damaged 7-9-m fiberglass fishing vessels used to catch common hake and crabs

CADUZZI SALAS



A scene of devastation from Boyeruca in the O'Higgins Region, Chile. The earthquake and tsunami mainly affected six of Chile's 15 Regions

has also opened a special bank account to assist those who have been made destitute by the quake and tsunami.

The Ministry of the Economy has promised a fund of 5,500 million pesos (US\$10.3 mn) to invest in rebuilding the artisanal fishing sector, with a 'fast track' to accelerate the process of reviving the sector. Meanwhile, 2.1 million pesos (US\$4,000) has been allocated to assisting artisanal fishing vessel owners replace lost and damaged vessels and gear.

According to the Food and Agriculture Organization of the United Nations (FAO), 1,000 fishing vessels are considered lost, as reported in the Situation Report of the United Nations Office for the Co-ordination of Humanitarian Affairs (OCHA). The FAO has requested for an assistance of US\$1 mn for the fisheries sector from the UN's Central Emergency Response Fund (CERF) to procure fishing equipment to benefit 6,900 fishers.

Zoila Bustamante says, "This help being planned by the government is but charity, and not sufficient. With this money the affected people will never be able to repair or purchase new vessels. One of the main problems facing artisanal fishers across Chile is indebtedness, and they don't have the capacity to secure bank credit. We feel that this gesture by the government is insufficient to repair the great damage done by the tsunami".

"In these sad times for our country and especially for those *caletas* of artisanal fishers, two words are uppermost in our minds: solidarity and union," says the CONAPACH president.

However, he later announced "there is no precedent that allows us to evaluate whether there is a criminal responsibility, and therefore the Prosecutor will not open a criminal investigation for the time being because there are contradictory accounts with respect to whether or not the organs of State are responsible".

Criticism has also been made of the official response to providing relief following the disaster. Instead of tapping into national networks of traders, agricultural producers and distribution centres, the government struck a deal with four large supermarket chains in the VII and VIII Regions, who were paid US\$10 mn to provide food, water and clothing.

Faced with such conditions, CONAPACH established a solidarity network called "*Caleta for Caleta*", which sought to link artisanal fishers and communities in regions unaffected by the earthquake and tsunami with those who were affected, and to channel aid particularly to those *caletas* that were totally flattened in the VII and VIII Regions. Says Zoila Bustamante, the President of CONAPACH, "The main idea is that *caletas* that did not suffer any damage, like those in the north and in the south, can help those who are now suffering. Each *caleta* should sponsor a *caleta* that has suffered damage and provide it material support". CONAPACH

For more

www.conapach.cl

CONAPACH

www.ecoceanos.cl

Ecoceanos

www.greengrants.org/breakingnews.php?news_id=277

Chilean Disaster Recovery Fund

http://www.cinu.org.mx/chile/docs/OCHSiteresituacion_No._5-eqOCHA-20100308%5B1%5D.pdf

OCHA Situation Report

Successful Experiment?

Chile's experience with territorial use rights in fisheries shows their potential for the management of coastal resources, provided some simple safeguards are put in place

The partition of coastal fishing grounds into territories has been common practice among communities of fishers and gatherers as an instrument to assign access privileges, rotate harvests or protect areas significant for the conservation of valuable resources. Rules granting individuals or communities exclusive access to fishing grounds have been in place since pre-historic times in the form of traditional marine tenure systems, revealed to scientists during the 1970s through the works of the late Bob Johannes and others. The notion was crystallized in 1982 in the acronym TURF (territorial use rights in fisheries) by F. T. Christy Jr., a consultant to the Food and Agriculture Organization of the United Nations (FAO).

stocks of bottom-dwelling (benthic) shellfish stocks.

Paradoxically, while many traditional tenure systems have been eroded by the application of policies shaped after the industrial fishing experience, managers from Western countries are showing appreciation for the possible merits of TURFs. Contrary to the gradual, bottom-up, long-term evolution of TURFs within traditional tenure systems, however, some TURF systems have been introduced in recent years top-down, through innovative legislation or policies crafted by agency managers. Prominent examples include the abalone fishery of South Africa and the benthic fisheries of Chile. In these and other cases, innovative management was prompted by the failure of conventional quota-based management leading to notorious fishery collapses, and the subsequent urgencies imposed by economic crises and social unrest. We had the opportunity to be outside observers of the Chilean TURF system since the beginnings of its implementation, through collaboration with fishermen's organizations, managers and scientists.

...innovative management was prompted by the failure of conventional quota-based management leading to notorious fishery collapses...

TURFs have attracted widespread attention in recent years in the context of 'rights-based' fisheries management. The latter is often predicated as the most natural solution to the tragedy of the commons which has been singled out as the main culprit of overfishing and fishery collapses. Besides territories, user rights or privileges can involve a portion of the catch (the case of individual transferable quotas) or a fraction of effort units (for example, lobster traps). Within this broad family, TURFs are most suited to the case of sedentary resources, for example, most

Urban areas

Chilean benthic fisheries involve commercial diving, traps and gathering of algae and molluscs in the intertidal zone. Artisanal fishers are integrated in communities known as *caletas*. In rural areas *caletas* resemble the fishing villages of other parts of the world, while they tend to be less well defined in urban areas. *Caletas* conform to the social, ecological and economic template of Chilean artisanal fisheries.

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Most fishers from a *caleta* are members of one or more local organizations, generically known as 'syndicates', which, incidentally, are by no means equivalent to the homonymous labour movement organizations of industrial countries. Syndicates are grouped into regional federations, and federations into two major national confederations. The resources targeted by commercial divers are generally valuable; some of them fuel major export-oriented fisheries. For instance, Chilean divers account for around 80 per cent of the world's supply of sea-urchin roe.

The most significant among benthic resources is *loco* (*Concholepas concholepas*), a pricey snail vaguely and superficially resembling abalone. Before the mid-1970s, *loco* was consumed only domestically; annual landings were in the order of 5,000 tonnes. Exports boomed after the product was introduced to Japan in 1976, and landings climbed to around 25,000 tonnes while the fishery was regulated with a legal size and fishing seasons under an open-access regime. In 1989, sensing symptoms of overfishing, managers closed the fishery for three-and-a-half years. This draconian measure did not stop fishing: effective enforcement is illusory in a fishery operated by small boats spread along a coastline that spans 38 degrees of latitude. The main result of the closure was the marginalization of the fishers because of the development of a flourishing black market.

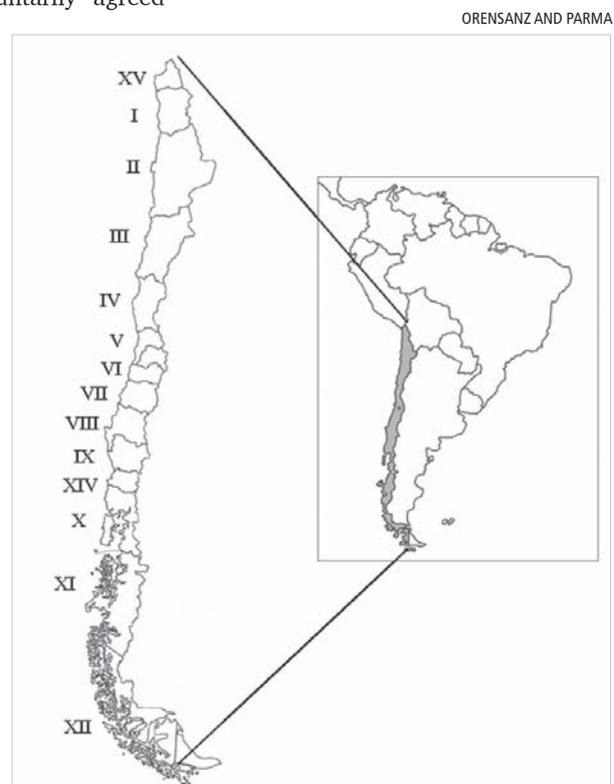
Meanwhile, political tensions and social unrest grew. In 1991 the then president of the country, Patricio Aylwin, and members of his cabinet visited the region of Los Vilos (Region V, see map), the cradle and hub of commercial diving. Artisanal fishermen were cutting roads and burning tyres. In an audacious move, Oscar Avilez, leader of the regional federation of artisanal fishers, interrupted into a meeting that the president was having with regional authorities. People waiting outside expected Oscar to be detained by the presidential authorities. Instead, he was embraced by President Aylwin, who immediately instructed the

Undersecretary of Fisheries to consider evidence of recovery assembled by fishermen with assistance from some biologists. In the end, the ban was lifted and the fisheries authority introduced a new management regime: individual non-transferable quotas assigned to registered commercial divers. Five

The resources targeted by commercial divers are generally valuable; some of them fuel major export-oriented fisheries.

years later, the catch per unit effort (CPUE) had returned to the very low level that preceded the closure due to ineffective enforcement and illegal trading of *locos* and tickets.

Years earlier, before and during the closure, some fishermen had been experimenting with innovative practices, in some cases in collaboration with academics, most notably Professor Juan C. Castilla and his co-workers at the Catholic University of Santiago. *Loco* recovered rapidly within areas where fishermen voluntarily agreed to stop fishing. These experiences paved the way for the inclusion in a new fisheries act, passed by Congress in 1992, of a particular form of TURF, locally known by the acronym of AMERBs (after the Spanish for 'areas for the management and exploitation of benthic resources'). Elaboration of the interpretive document of the law (the *Reglamento*) was a protracted process that involved a lengthy debate among fishermen, managers, scientists and politicians. The implementation process started in 1997, and by 2000, *loco* could be legally



Map of Chile showing the country's 15 administrative regions with coastline. Regions IV and V are the cradle of the TURF system

Excerpts from an interview with Oscar Avilez, leader of the regional federation of artisanal fishers

On why he was forced to gatecrash a meeting of President Patricio Aylwin:

For a simple reason: the scientific community and the fisheries authorities did not trust the fishermen. But we had results to show, which were backed by data, statistics and planning. Though the authorities knew that, the president was not informed. When he heard us out and listened to our proposal, he believed us, and ordered the lifting of the closure of the loco fishery.

On whether the artisanal fishers' grievances were met after the introduction of territorial use rights in fisheries:

This has been a test. Many organizations were strengthened and stayed within the system. Others have not been able to solve their problems: they were born weak, and did not survive the crisis. You need strong organizations.

On the relevance of such regimes now:

In my opinion, the (AMERB) system has not yet got institutionalized. It is a good management measure, but you need leadership.

On outstanding issues:

First, it is necessary to acknowledge that it is important to take care of the resources, and exploit them rationally. Second, the authorities must follow technical advice rather than populist policies.

On the pros and cons of implementing a territorial rights regime through fishers' organizations:

On the plus side are the plentiful natural resources, and the solid organization of fishers' groups. The latter are needed to implement models that serve both resources and communities. On the downside is the indolence of organizations which have a culture of subsidy dependence. This is damaging because it curtails the independence of the organizations, limiting their capacity to solve problems through their own ideas. Organizations must be self-sufficient.

On the future of small-scale fishing for both sedentary and mobile species:

It must be shown that we have an established capacity to reverse the undesired effects in fisheries, and to overcome systems that are imposed top-down and are often wrong. This is needed if our activities are to survive and improve in the future. We must develop capacities related to our activities.

There is another issue that I would like to address: environmental quality. Specifically, we oppose the installation of thermoelectric plants in the neighbourhood of our fishing grounds and management areas. This is particularly problematic in the case of La Higuera, our commune. A marine reserve, unique for the diversity of its marine life, is under threat. So too is the subsistence of several fishing communities in the region.

harvested only within AMERBs. By 2007, 732 tracts had been designated for AMERBs, of which 237 had an approved management plan that included *loco* as a target resource. Functioning AMERBs involved 14,324 registered fishers.

AMERBs are granted to fishers' organizations, not to fishing communities. Each AMERB consists of a tract of seabed where members of the organization have exclusive fishing privileges over resources declared as target. In order to get and keep those privileges, they must conduct a detailed baseline study, as well as annual surveys of the target resources (for example, *loco*). Studies are contracted with consultants that report to the administration; fishermen do not have a protagonist role in assessment, management and setting of objectives. The implementation process, particularly the protocol for requesting

an AMERB, was largely conceived by scientists with an ecological background, which transpires into the nature of the information required. The cost of the studies is high, but until recently was paid mostly with subsidies of various forms. Once an AMERB is granted, the fisheries administration does not keep track of the membership of the organization, or of the way in which costs and profits are split among members. AMERB-holding organizations pay a tax per unit area, which is the same irrespective of the resource targeted, the region of the country, or the productivity of the grounds. Privileges are granted for periods of four years, can be cancelled by the authority if the organization does not comply with the regulations, and are indefinitely renewable. Management plans are negotiated individually for each AMERB by the

organization and the centralized fisheries authority. There is no regional co-ordination, and no formal mechanism for the periodical review and adjustment of the system.

The inception of the AMERBs was a desperate move to address the most pressing problems that had led to recurrent crises in the *loco* fishery: unenforceability of regulations and lack of control of harvest rates. Having been granted secure and exclusive access to tracts of seabed, territorial use privileges gave fishers the incentives to protect their resources, at least in principle. *Loco* abundance recovered within the AMERBs. An important side effect of the AMERBs was the strengthening of the syndicates, because activities related with the AMERBs require significant collective action. Organized fishermen self-impose strict regulations and severe penalties for transgressors, contribute to the sustenance of widows and elderly or ill fishermen, and co-ordinate among themselves for vigilance. Sales of *loco* from AMERBs are arranged before the harvest, which, in principle, gives fishermen the opportunity for better deals. True, prices vary, but markets, not AMERBs, are to be blamed for the downs. Besides, fishermen get access to credit, as banks take as collateral the *loco* stocked in the AMERBs, as appraised by the consultants. Politicians, managers, most scientists, many leaders of fishermen's organizations, the press and the public have, on balance, a positive perception of the system. Managers can show an orderly fishery which yields a product of comparatively good quality. Leaders of fishermen's organizations have been in a good position to attract subsidies from government and non-governmental organizations (NGOs), and fishing has gained a secure place in a coast increasingly subject to alternative uses. Consultants do business, and scientists see the opportunity to test paradigms of fisheries management, like the merits (or lack of them) of rights-based options.

So, is the Chilean AMERB system a success story? The answer is: it depends on whom you talk to. Success is a relative notion: it can be gauged only if the objectives are specified. Objectives reflect societal

values, which are multiple and often conflicting: biological sustainability, economic efficiency, social equity, cultural identity, ecological integrity, and so on. The design and regulatory framework of AMERBs emphasized ecological sustainability over other societal goals, for understandable

Politicians, managers, most scientists, many leaders of fishermen's organizations, the press and the public have, on balance, a positive perception of the system.

reasons. In retrospect, it is clear, however, that some potential problems went unforeseen. Some pertain to the management system itself. Due to the fixed territorial tax, organized fishers quickly claimed relatively small areas holding the most productive patches of seabed. The result was a *de facto* dual management system: a legal system inside and an illegal one outside the TURFs. Stocks outside the AMERBs are severely depleted. In some cases, the introduction of AMERBs has jeopardized pre-existent traditional tenure systems, successful even if informal. This was the case of some communities that harvest bull kelp in Region VI using a lottery to regulate access.

Other problems neglected by design pertain to the economics of the AMERBs.

JAVIER RODRIGUES AND REVISTA PUERTO



Landing *locos* harvested from an AMERB. Fishermen get access to credit from banks which take as collateral the *loco* stocked in the AMERBs

At least initially, the membership of the many AMERB-holding organizations (which is not effectively regulated) grew to the point where the rent dissipated, weakening the incentives that are the conceptual core of the system. Fishermen's organizations are now aware of the problem, worsened by low international prices, and have introduced strict entry rules. In some cases, this has happened too late. To complicate things, access to credit—in principle a plus—left many fishermen badly indebted; they often choose to overharvest their fishing grounds rather than default on loan repayments to the bank.

Equity is also an issue. When the AMERBs were implemented some fishers managed to be part of the system, while others did not, for various reasons—from lack of information to the feeling that fishers have the right to fish wherever they wish. The issue of exclusion and inclusion has resulted in a number of local conflicts. In Ancud Bay (Region X), for example, hundreds of fishers revolted against the introduction of AMERBs, illustrating the difficulties inherent to the partition of fishing territories when a large number of fishers have historically harvested the same grounds. The conflict was mediated by the Catholic dioceses, and was accompanied by the creation of a local independent confederation ('Confederation of Fishers for Equity'). In the end, an agreement was reached to return some of the designated tracts and to stop allocating new TURFs within the bay.

The initial fascination with the success of the AMERBs, at least as perceived by scientists and managers, led to their widespread application to resources other than *loco*, and in contexts different from the *caletas* of central Chile (Regions IV-VIII). Clearly, AMERBs are not a 'one-size-fits-all' solution for the management of Chilean benthic fisheries. Elinor Ostrom, who won the 2009 Nobel Prize in Economics, closed her keynote address at a meeting in 2004 of the International Association for the Study of Common Property (IASCP) at Oaxaca, asking a large and diverse audience

to repeat with her thrice: "There are no recipes."

Perhaps this, too, is the main lesson to be extracted from the Chilean experience with the implementation of TURFs. Systems of this nature have much potential for the management of coastal resources, but when implemented by design (as opposed to established by tradition), there are some simple safeguards to be considered. First, there has to be a careful analysis of the stakeholders before access privileges are granted. In the Chilean case, there was a 'first-come first-served' policy, which was reasonable in the case of the *caletas* from central Chile but not in other contexts (like Ancud Bay) where there were multiple users of the same fishing grounds, and some user groups were poorly organized and not well informed. Second, it is important to create regular and participatory feedback mechanisms to evaluate and correct the system as it evolves, attending to multiple societal values, learning from experience, and adapting to changing realities. 

For more

fao.org/DOCREP/003/T0507E/T0507E01.htm

Territorial Use Rights in Marine Fisheries: Definitions and Conditions

[icsf.net/icsf2006/jspFiles/cedepesca/Sustainable Fisheries and Livelihoods in Latin America: Consolidating and Securing Artisanal Fishing Access and User Rights](http://icsf.net/icsf2006/jspFiles/cedepesca/Sustainable_Fisheries_and_Livelihoods_in_Latin_America_Consolidating_and_Securing_Artisanal_Fishing_Access_and_User_Rights)

fao.org/fi/oldsite/FCP/en/CHL/profile.htm
FAO Country Profile: Chile

www.subpesca.cl

Chile Subsecretariat of Fisheries

Common Concerns, Lasting Bonds

A recent workshop in Chile witnessed great debate on consolidating and securing rights for small-scale fishers in Latin America

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The Latin American workshop on artisanal fisheries, “Consolidating and Securing Artisanal Fishing Access and Use Rights”, held from 4 to 8 August in Punta de Tralca, Chile, was long in the planning. Building on discussions initiated in 2005 at the Santa Clara Workshop in Argentina, the organizers of the event had been discussing and making detailed plans for the Chile workshop since April 2008. Four days of intensive discussions at the workshop provided the basis for a rich interchange of views and experiences, and some animated exchanges. Agreement was reached on many issues of common concern among the 80-odd delegates from the 12 countries representing the Latin American and Caribbean region.

In the end, the participants concluded the workshop by delegating the work of drafting a common position to a virtual editorial panel. This ‘wise panel’ will draft a joint declaration on small-scale fisheries in Latin America, with concrete proposals to be presented at the forthcoming World Conference on Small-scale Fisheries, to be organized by the Food and Agriculture Organization of the United Nations (FAO) in Bangkok, Thailand, from 13 to 17 October 2008.

The Chile workshop was the third in a series of workshops organized by the International Collective in Support of Fishworkers (ICSF) and its partners, designed to focus discussions, and reach some common understanding, on the rights and responsibilities of

Observations 1

An important lesson from the Chile Workshop arises from the evident heterogeneity within the artisanal fishery of Latin America. Various political and commercial agenda are being developed in parallel towards controlling the organizations that represent fishermen. These agenda appear opportunistic and short-term in nature but with far-reaching implications for artisanal fishermen, coastal communities, indigenous peoples and democratic organizations.

They seek to create a situation of dependency on, and linkage with, neoliberal policies and strategies at the government level (privatization of

rights, divisions within organizations, encouraging competition amongst artisanal fishers and with other sectors and social actors); with the fishing industry (control of access to fishery resources, low costs and seasonal labour); with the real-estate industry (to control access to coastal areas); large retailers (sourcing/supplying low-cost ecolabelled fish); and international NGOs (linked to the interests of large retailers).

Given these tendencies, consolidating, securing and protecting artisanal fishing access and use rights by coastal and inland fishing communities should be seen as the vital priority.

*This report is a personal account compiled by **Brian O’Riordan** (briano@scarlet.be), Secretary, ICSF Belgium Office, from various sources, with special thanks to Patricio Igor of Centro Ecoceanos, and to CONAPACH (www.conapach.cl) and Ecoceanos (www.ecoceanos.cl)*

coastal and artisanal fishing communities whose livelihoods depend on access to, and use of, resources in marine and inland fisheries. It followed on from earlier workshops that focused on Asia (Siem Reap, Cambodia, May 2007) and eastern and southern Africa (Dar es Salam, Tanzania, March 2006 and Zanzibar, Tanzania, June 2008).

The workshop was launched by the principal host, Confederación Nacional de Pescadores Artesanales de Chile (CONAPACH, the National Confederation of Chilean Artisanal Fishermen), with a presentation in Chile's National Parliament, the Congreso Nacional in Valparaiso. CONAPACH President, Zoila Bustamente, highlighted many of the issues of common concern due to be addressed by the workshop. The fact that globally fish resources are in sustained decline is putting the future of Chile's coastal communities at risk, she observed. At the same time, she criticized the way that a regional fisheries management organization for the South Pacific was being set up, considering only the interests of the industry and excluding participation by artisanal fishers. She accused fisheries reform in Chile of being turned into a "laboratory" for fisheries and aquaculture policies, and called for the individual transferable quota (ITQ) system to be evaluated as a matter of priority. The implications of the ITQ system for resource conservation and sustainability need to be addressed, and the social and economic impacts of the system on artisanal fisheries and coastal communities must be evaluated, she insisted.

"ITQs will have far-reaching repercussions on the policies for access to, and use of, fishery resources in Latin American coastal countries," she said. Furthermore, she accused the Chilean State of facilitating the accelerated and massive expansion of industrial aquaculture, causing sanitary, environmental and social impacts on coastal communities in the south of Chile. This has radically changed the way shellfish divers and beach gatherers organize their activities, due to the pollution of natural (shellfish) beds, leading to serious social impacts. CONAPACH has demanded that the Chilean State suspend temporarily all further salmon conces-



The participants of the Chile Workshop, Consolidating and Securing Artisanal Fishing Access and Use Rights, held from 4 to 8 August in Punta de Tralca

sions, so that a re-evaluation can be made of the use of coastal spaces destined for salmon aquaculture, to ensure that the industry respects the working conditions of the labour force, and that the marine environment, public health and the rights of coastal communities are protected.

Zoila Bustamente warned: "Today, in Latin America and the Caribbean, States are in a race against time, and urgent decisions must be taken, in a participative and well-informed manner, that assure the political governance, protection and sustainable management of coastal resources and ecosystems, as well as national food security, decent work, and the strengthening of the social and economic

The Chile workshop was the third in a series of workshops organized by the ICSF and its partners, designed to focus discussions, and reach some common understanding, on the rights and responsibilities of coastal and artisanal fishing communities...

dimensions of coastal communities. As a basic principle, States should establish access, use and allocation systems for marine resources in both coastal and oceanic areas, with preference afforded to artisanal fisheries, coastal communities and indigenous peoples."

In response, the Fisheries Subsecretary, José Chocair, second in the chain of command in the Chilean fisheries administration, after the Minister of the Economy, referred to the 1970s' law of Salvador Allende that established a Marine Ministry. He gave assurances that under President Verónica Michelle Bachelet Jeria, the current government is committed to addressing issues of

ment and Sustainable Fishery). Some historical context was provided on the process subsequent to the March 2005 Santa Clara Workshop, which had seen the establishment of an electronic discussion forum on artisanal fishing in Latin America.

The introductions were followed by formal presentations by fishworker and coastal community organizations. These highlighted the key problems facing artisanal fishermen and coastal communities in the region, and the ways in which the various organizations are addressing them.

After lunch, FAO Consultant Andres Mena Miller gave a presentation on the planned FAO World Conference on Small-scale Fisheries (4SSF). Interviewed subsequently by Patricio Igor de Centro Ecoceanos, Miller highlighted that “problems of access and use rights, and social problems of artisanal fishing are a global concern, even for developed countries”, and that “even in developed countries, artisanal fishing is underdeveloped.”

On Tuesday evening and Wednesday morning, participants discussed fisheries management and globalization. Issues presented included the United Nations Convention on the Law of the Sea (UNCLOS) framework and fisher-

The introductions were followed by formal presentations by fishworker and coastal community organizations. These highlighted the key problems facing artisanal fishermen and coastal communities in the region.

social security for artisanal fishers. Discussions towards creating a Marine Ministry would include the rights of access to, and use of, marine resources, coastal marine zones, food sovereignty of coastal communities, and local and regional economies, he assured.

The workshop itself started on Tuesday, 5 August, with introductions from representatives of the four partner organizations staging the event—ICSF, CONAPACH, Centro Ecoceanos, and Centro Desarrollo y Pesca Sustentable (CeDePesca, Centre for Develop-

Neoliberal Policies and Artisanal Fishing in Latin America: Some Voices

The Chile Workshop shows us that fishermen in Latin America share many common problems. To a greater or lesser extent, all are affected by the application of the neoliberal capitalist model in the artisanal fishing sector. It is a disgrace that our country, Chile, heads the league table ranking on environmental degradation, the erosion of community rights, and the ever-greater concentration of property into fewer hands. All this started after the government of Ricardo Lagos initiated the regulation on catch quotas that we are now exporting throughout Latin America.

– *Cosme Caracciolo, General Secretary, CONAPACH*

This meeting is taking place at a key moment as regards the future of artisanal fishing rights, and those of coastal communities and democratic organizations. These are threatened by the imposition of neoliberal policies based on the implementation of the exclusive system of ITQs. In the case of Chile, ITQs have resulted in the progressive exclusion of artisanal fishermen from access to the main fisheries and to coastal areas, weakening their organizations, undermining food security and marine biodiversity, increasing concentration of wealth and the transnationalization of the fisheries and aquaculture sectors.

– *Juan Carlos Cardenas, Director, Centro Ecoceanos*

“Rachel Doesn’t Exist”: Field Trip Notes

On Wednesday morning, participants visited the renowned artisanal fishing port and fish-landing centre in San Antonio, where they were able to observe a range of fisheries-related activities. Among those present were people unloading catches, beach-side vendors, women gatherers, and fishermen recently returned from fishing. Fishing in San Antonio has been particularly hard hit by the demise of the hake fishery, and by the upsurge in squid, a species that now dominates the catches. San Antonio has been in the forefront of advocating a ban on trawling, with local fishermen blaming the trawl gear for the demise of hake. The town has a bleak air about it, with the prevalence of black flags, paltry landings, and a partially deserted, brand new artisanal port installation. Women from Brazil were particularly impressed by the work of the men and women who prepare the longlines for fishing. Rachel, a woman *encarnadora* (hook baiter), was amazed to see the official professional

fisherwomen’s registration cards from Brazil. The workshop participants asked Rachel if women in Chile were recognized in the artisanal fishery. Rachel told them that as far as the fishing unions, the State and the services providing social security were concerned, she did not exist. Rachel then showed her hands to the visitors and invited them to look at her fingers, and to note that she had no fingerprints. These had vanished under the scars and wounds inflicted by the hooks. The *encarnadora’s* work involves cleaning hooks, and then arranging them and making them ready for baiting one by one, on a line that contains around 1,000 hooks. For this, they get paid roughly US\$4 or 5. “Rachel doesn’t exist” is a phrase that highlights but one of the many struggles facing the small-scale fishing sector as it strives to survive with autonomy, retaining its own culture, and displaying a long-standing commitment to defending its rights.

ies management regimes for international waters, which are of particular significance in the Latin American and Caribbean region, given the low level of ratification of relevant international treaties. Likewise, the region is highly affected by globalization, and the policies of the World Trade Organization (WTO), with a significant number of bilateral and regional free trade agreements signed with the world’s major economic powers.

On the third day of the workshop, some fishworker representatives asserted that insufficient opportunity had been given for them to voice their concerns and exchange views. CONAPACH President Zoila Bustamante addressed the issue and proposed that the afternoon be given over to a roundtable discussion among fishworker representatives, with the other participants observing, facilitating and recording the proceedings. This resulted in a rich and spirited exchange that lasted for about three hours.

Many issues of concern were voiced, which fed into the discussion groups that were subsequently formed. Among

the topics discussed were the following: the fishmeal reduction industry; the relationship between fishworker organizations and other social actors; the impact of intensive shrimp and salmon aquaculture; conflicts with, and displacement of fishers by, other sectors, like aquaculture, tourism, industry, sport fishing, and real estate; privatization of coastal areas; creation of marine protected areas that prohibit fishing; encroachment into exclusive artisanal fishing zones; and illegal activities,

In Chile, operators who qualify as ‘artisanal fishing vessel owners’ use powerful vessels and industrial fishing techniques to catch small pelagic resources that are sold to the reduction sector.

including piracy, drug smuggling and illegal fishing.

Particular points of contention arose over fishmeal. In Chile, operators who qualify as ‘artisanal fishing vessel owners’ use powerful vessels and industrial fishing techniques to catch

small pelagic resources that are sold to the reduction sector. Vessels up to 50 gross registered tonnage (GRT) and 18 m in length qualify as 'artisanal'. Such vessels operate in significant numbers in Chile's northern and central southern regions. There was also heated debate among the workshop participants on the role of other social actors in the artisanal fishery, notably non-governmental organizations (NGOs) and indigenous peoples, and linked to this was the issue of establishing a pan-Latin America artisanal fishermen's organization, which could exclude other social actors.

While it may have been disappointing that conclusions were ultimately deferred, the Chile workshop did offer grounds for optimism. The virtual committee or 'wise panel' formed at the end of the workshop has a wealth of texts to draw on. With time, tensions will hopefully be forgotten, and the high spots reached during the four days of discussion, and the friendships and bonds formed will be remembered. 🐟

For more

http://icsf.net/icsf2006/jspFiles/cedepesca/background/english/background_2008.jsp

ICSF workshop: Consolidating and Securing Artisanal Fishing Access and Use Rights, held from 4 to 8 August 2008 in Punta de Tralca, Chile

<http://www.ecoceanos.cl>

Ecoceanos

<http://www.cedepesca.org.ar/>

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Confederacion Nacional De Pescadores Artesanales De Chile

Mucho Moolah, Sweatshop Standards

Despite being a jewel in the crown of Chile's export economy, the salmon aquaculture industry is plagued by poor workplace and labour standards

The salmon industry is one of the jewels in the crown of Chile's export economy, which has grown at an average annual rate of 15 per cent over the last 15 years. Although production has stagnated in the last couple of years, the value of exports has not. In 2006, salmon exports reached US\$2.2 bn, up 28 per cent over 2005, despite a fall in production. Projections for 2007 predict earnings in excess of US\$2.5 bn, assuming that demand increases will be sustained in the international markets, which take 98 per cent of Chile's farmed salmon production.

The Los Lagos (Xth) Region is Chile's salmon centre, concentrated around Puerto Montt and the island of Chiloe, producing over 90 per cent of Chile's salmon and employing around 50,000 people, some 60 per cent being women.

But gradually salmon-growing and export-processing facilities are being established further south in Chile's most southerly, least populated, most isolated regions, where pristine environmental conditions provide ideal growing conditions.

But working in Chile's salmon aquaculture sector entails dangers to health and safety, and has led to some fatalities. Using data from the Chilean Navy, the Labour Directorate, and the governments of the Los Lagos and Aisén Regions, the non-governmental organization, Centro Ecoceanos, has recorded that between February 2005 and April 2007, 42 workers in the aquaculture—mainly salmon—industry have been

killed at work, or have gone missing, presumed dead.

They were engaged as divers (to inspect, maintain and repair cages), salmon feeders, workers who maintained and serviced the salmon cages and related infrastructure, security guards, and feed-plant and fish-plant processing workers.

Most of the workers are in the export-processing plants, where, according to Directorate of Work data, 91 per cent of the tasks are carried out by women, many being single parents. They work shifts, both day and night. Fewer workers are engaged in the rearing centres.

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Safety standards

Centro Ecoceanos alleges that in most cases, the high death toll could have been avoided if health-and-safety standards had not been compromised, and if proper training and equipment had been provided. While the salmon industry in Chile might be a giant in the export sector, reporting First-World earnings, it seems that Third-World standards are applied to working conditions and environmental regulation, says Juan Carlos Cardenas, Director, Centro Ecoceanos.

*This article by **Brian O'Riordan** (briano@scarlet.be) has been compiled from various sources*

Cardenas points out that multinationals own 36 per cent of Chilean salmon-producing companies, but apply double standards in Chile that contravene the Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises. These are designed to promote corporate social and environmental responsibility, and deal with employment

Unfortunately, the record of Marine Harvest shows a big gap between the standards applied in Norway and Chile. Marine Harvest has incurred a long list of penalties for not complying with the labour laws

and industrial relations, human rights, environment, information disclosure, bribery, consumer interests, science and technology, competition and taxation.

Noteworthy among the multinational companies is Marine Harvest, the biggest corporation operating in Chile, bought by Norwegian billionaire John Fredriksen on 6 March 2006 for Euro1.175 bn. Unfortunately, the record of Marine Harvest shows a big gap between the standards applied in Norway and Chile. Marine Harvest has incurred a long list of penalties for not complying with the labour laws. The report of the National Labour Directorate, given

to the Chamber of Deputies' Fisheries Committee for its 'salmon review', details some 80 fines applied by the Inspectors of Work in the Xth Region, with amounts totalling more than 63 mn pesos.

In a letter dated 1 June 2007 to Sven Aaser, the Group Chief Executive of Marine Harvest, representatives of Chile's salmon workers pointed out that many workers in Chile's salmon industry receive wages of around US\$285 or Euro210 per month, that more than half have no life insurance coverage, and that more than three-quarters have no disability insurance.

On 14 December 2005, Javier Velásquez Millán, aged 24, died following an accident at work at Marine Harvest's Chamiza plant. According to the accident report, Velásquez was carrying out his duties normally. A forklift truck passing close to where he was working tipped over because the floor was not level. The load it was carrying fell on him, killing him immediately. According to his workmates, Velazquez was not provided with any protection. The accident report further states that the surface on which the truck was working was not safe for operation without risk.

In August 2006, two senior executives at the Marine Harvest Chamiza plant were charged with involuntary homicide for their part in the accident. Simultaneously, the family of the victim mounted a claim for compensation. Despite the progress made in the case, according to Jaime Gatica, the lawyer acting for the deceased worker's family, "Marine Harvest has tried to evade and minimize its responsibility in the accident. It has not behaved in a direct or transparent way. This transnational has shown zero corporate social responsibility." To date, Marine Harvest has refused to pay any compensation to the family of the deceased worker, and has not admitted any liability in this and other accidents at work.

Based on this and similar incidents, Cardenas calls for a wide-ranging discussion on the real environmental, economic and social costs of salmon farming in Chile, and a review of alternative models of aquaculture that could serve to establish more democratic and so-

COORDINADORA DECIMA SUR



A poster protesting against working conditions in Chile's salmon aquaculture industry

cially just production systems that promote environmental sustainability and cultural diversity. Without such a process, Cardenas believes, the Los Lagos, Aisén and Magallanes Regions (Regions X, XI and XII) could be transformed into a kind of 'salmon republic', with laws dictated by feudal salmon bosses to maximize offshore profits, leaving a social and environmental desert in their wake.

Official statistics reveal a high rate of accidents at work in the Los Lagos Region, where 90 per cent of Chile's salmon is produced. In 2005, accident rates were 11.2 per cent in the rearing units and 13.9 per cent in the processing plants, far above the national average of 7.96 per cent for industrial workers. According to industry sources, 73 per cent of accidents occur in the processing plants, 19 per cent on marine sites, and 5 per cent in the feed plants. Centro Eoceanos says that the maritime authorities acknowledge that only 5 per cent of the accidents and illnesses suffered by divers operating in the salmon industry are reported.

Over the last few years, according to the National Directorate for Labour, two-thirds of the salmon companies in the Xth Region have violated the labour laws. During 2003-2005, a total of 572 programmed inspections were carried out, 404 of which resulted in fines, equivalent to a violation rate of 70 per cent.

The main violations relate to:

- employment of casual labour (lack of contracts);
- violation of health-and-safety rules at the workplace;
- unsafe underwater working conditions;
- violation of maternity rules; and
- anti-trade-union practices, including violation of the right to association, and harassment of union members and leaders.

Divers employed in the salmon industry are particularly vulnerable to occupational ailments and accidents. There are around 4,000 divers in the industry, of whom 100 are commercial divers certified to international standards. The rest are workers from the ar-

tisanal fishing sector who have learned diving from friends and relations. They undertake about 4 mn dives a year. For the 20 years that they have been diving for the salmon aquaculture industry, there has been no professional regulation of their work. Only in 2005 did the Chilean Navy modify the Diving Regulation for Professional Divers Act, to focus on regulating the work in the salmon industry.

A small proportion (less than 10 per cent in 2006) of the so-called 'shellfish divers', who are allowed to dive to 20 m, had obtained 'intermediate shellfish divers' licences that permit them to dive to 36 m. The intermediate shellfish diver qualification requires the use of newer, safer equipment. However, training is a major problem. In the first qualifying examination carried out by the Chilean Navy in April 2006, only 18 of the 216 workers who took the test passed.

The shellfish divers are more prone to accidents (reporting a rate of 80 per cent) than commercial divers (20 per cent). The latter are much better qualified and trained, but the salmon industry does not hire them for reasons of cost. A commercial diver's charges are four times more than a shellfish diver's.

Mariscope, a commercial oceanographic research company, has documented cases of shellfish divers in rearing centres diving to 42 m, and some have admitted going down to 65 m. According to Mariscope, of the 157 shellfish divers surveyed, 87 per cent have been affected by diving-related illnesses during their working lives.

On 5 July 2006, the Special Ses-

Official statistics reveal a high rate of accidents at work in the Los Lagos Region, where 90 per cent of Chile's salmon is produced

sion of the Chilean Chamber of Deputies, analyzed allegations of low environmental and labour standards in the salmon industry. Labour Minister Osvaldo Andrade stated, "The work-

BRIAN O'RIORDAN



Working in salmon fish cages in Chile, like the one above, entails dangers to health and safety

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place conditions and equipment used lack certification, the workers are not competent or trained, and, given that cages are more than 20 m deep, and that 'yo-yo' diving practices are used, involving multiple decompressions, frequent accidents are common, often not reported, with a regrettable fatality rate."

Illustrative of the disregard for the health and safety of workers is the reaction of the salmon industry to the earthquake that hit Chile's southern Aysén Region on Saturday, 21 April 2007. The 6.2-magnitude earthquake caused landslides and waves up to 6-m high, killing around 10 people (three confirmed, and seven missing, presumed dead), including four salmon

Salmon companies divest their responsibilities as employers by subcontracting the supply of labour. A 2004 survey showed that subcontracting is increasing

farm workers.

In January 2007, earth tremors in Aysén prompted the government to open discussions with the industry on suspending activities in the Aysén fjord as a precautionary measure, based on specialist recommendations. Few com-

panies followed the advice, and César Barros, President of SalmonChile, the salmon industry association, denied that any such advice had been given. This drew harsh criticism from Chile's President, Michelle Bachelet, who said, "It is unacceptable in the context of the tragedy that occurred in Aysén, that there are people denying that the government, on several occasions, through the Emergency Committee, officially notified the salmon companies to make sure of their workers' physical safety".

Visiting the area soon after the tragedy, Bachelet told representatives of the salmon industry that all farm installations in the Aysén fjord should be relocated to ensure the safety of workers. Six weeks later, in early June, the industry, represented by SalmonChile, opened negotiations with workers and the Interior Ministry to formulate an agreement that would see workers assuming responsibility for their own safety when undertaking work on farm installations in the earthquake zone.

The legality of such an agreement was questioned by Osvaldo Andrade, Chile's Minister of Work. René Haro Delgado, Director of Work for the Aysén Region, stated that while such an agreement may have been signed with the mutual agreement of all parties, "it does not absolve the companies from their labour and civil responsibilities and the penalties that may eventually follow an accident at work."

Salmon companies divest their responsibilities as employers by subcontracting the supply of labour. A 2004 survey showed that subcontracting is increasing. In 1999, 42.9 per cent of Chilean companies used subcontractors to supply workers. In 2003 this had risen to 50.5 per cent. Centro Ecoceanos estimates that over half the workforce in the salmon industry is provided by subcontracting companies. It points out that the regional Directorate of Work has the capacity to make checks on only 12 per cent of the salmon industry installations. In the case of Aysén, the Regional Directorate of Work has no boats to carry out inspections of the farm installations around Aysén fjord, to verify whether or not facilities comply with health-and-safety rules, and whether measures are being implemented to en-

sure the safety of the salmon workers in this high-risk zone.

In 2002 the Research Department of the Labour Directorate published a study by Elías Apud entitled “Ergonomic Study in Salmon Plants of the Xth Region”, based on work carried out in three factories. The report recommends that Chile “moves towards what the International Labour Organization (ILO) calls ‘decent work’, which is no other than work that is dignified, safe, productive and well-paid, where the workers are treated as human beings, and are assured of their individual and collective rights”.

The ILO has recently adopted a new Work in Fishing Convention that guarantees decent work for workers in the fishing sector. Given the growing importance of aquaculture as both an economic and food-producing sector, it is important that aquaculture workers too are guaranteed decent working conditions. Corporate profits should not be gained at the expense of the workers in the sector, as currently seems to be the case in Chile. 

For more 

www.ecoceanos.cl

www.ecoceanos.cl/sitio/docs/radiografia_salmonicultura_ecoceanos.pdf

Ecoceanos News

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The Pure Salmon Campaign

www.puresalmon.org/pdfs/Labor_letter_2.pdf

Letter to Marine Harvest from Chile's salmon unions

Fishworker organizations

Changing times, changing roles

Artisanal fishermen's organizations in Chile will need new skills and approaches to manage their fisheries

Artisanal fishermen's organizations in Chile were established to unite fishermen and fight for their rights. They are now increasingly required to manage quotas and engage in international commerce, functions that will demand a fundamental transformation of their ethos, style of functioning and *raison d'être*, requiring very different skills, approaches, relationships and management methods.

On 7 August 2006, Chilean artisanal fishermen formally celebrated 20 years of national-level organization. By chance, their celebrations coincided with the establishment of a new fisheries administration under President Michelle Bachelet.

The 2005 report on the artisanal fisheries sector published by the national fisheries service, Sernapesca, (www.sernapesca.cl), records 652 artisanal fishing organizations registered in Chile, with 35 regional federations and two national organizations. Of the 54,751 fishermen inscribed in the Artisanal Fishing Register (RPA), 42,091 belong to some kind of organization. Worker participation in these trade unions exceeds 75 per cent, a much higher level than in other labour sectors in Chile, where the levels of unionization in the total workforce declined from 14.5 per cent in 1991 to 10 per cent in 2000.

Chilean fishing communities organize themselves in *caletas*, or fishing hamlets and settlements. Today 40 per cent of the *caletas* are administered by organizations of artisanal fishermen. But the *caleta* became established as a formally recognized administrative unit only in 1997. Until then, artisanal fishermen faced a highly uncertain future, with the

great risk of alienation and expulsion. No explicit recognition was given to those areas where they carried out the shore-based activities on which their fishing livelihoods depended (landing and repairing their vessels, preparing their fishing gear, processing and selling their catches, and so on).

One main strength of Chile's artisanal fishing communities is the social networks that permeate the *caletas*, which are kept alive by the invisible work of women. These provide links between communities, and make up the social capital and the cultural identity of these people of the sea, who have ancient and deep links with the environment and the resources they extract. These elements—at times, highly visible, as in the case of the mutual support among fishermen at sea, and at other times, concealed—provide a safety net that makes the permanence and very existence of the coastal communities possible.

In 1998, following a national survey, 436 fishing *caletas* were registered along the length of Chile's 4,300-km coast. They were formalized through a Supreme Decree, which officially allocates to each region the name and number of *caletas* by region and province. Today, 453 permanent *caletas* are officially listed, with a further 105 temporary 'landing beaches', where fishermen may land their boats and carry out fishery-related activities on a seasonal basis. Of the permanent *caletas*, 343 or 75 per cent are classified as 'rural'.

Four categories

Sernapesca classifies registered artisanal fishermen into four categories: seaweed harvesters (*algueros*), boatowners (*armadores*), shellfish harvesters (*mariscadores*) and fishermen (*pescaadores*). In addition, there are unknown numbers

of unregistered fishermen, possibly as many as 20,000.

Indirectly, the artisanal sector generates work for about 250,000 people nationwide, and around 400,000 people belong to family groups who depend on artisanal fishing.

Overall, the fisheries sector employs between 90,000 and 100,000 people, and artisanal fishermen represent around 60 per cent of the workforce. The artisanal sector has witnessed spectacular growth over the last few decades. In the 1970s, the number of registered artisanal fishermen was around 5,000.

Today it is nearly 55,000. Vessel numbers too have grown, from 5,000 in 1992 to 13,776 today. Artisanal fishing is based mainly in the xth Region (32 per cent), viiiith Region (25.7 per cent), ivth Region (10.4 per cent) and vth Region (8.7 per cent).

There are currently close to 14,000 artisanal boats inscribed in the RPA, of which 3,957 are *lanchas* (completely decked motor vessels, up to 18 m long), 8,966 are *botes a motor* (open motor boats) and 1,219 *botes a remo* (open boats propelled by oars). Vessels that qualify as artisanal must be run by an artisanal operator, with an overall length no greater than 18 m, less than 50 gross registered tonnes and which are identified and registered as such by the authorities.

But formal statistics alone provide a gross underestimate of the actual social and economic dimensions of the Chilean artisanal fishing sector. The people involved in the actual fishing activities may be the most important and visible ones in the sector. But associated with them are an undetermined number of people and jobs that make their work possible.

Small boats that employ two or three crew are supported by many other professionals: the porters who prepare the fishing gear and launch the boat from the shore; the *encarnadoras*, women who clean, repair and bait the longlines; the beach officials who are responsible for the sale of the fish; and several others who provide services as filleters, fish transporters and petty traders.

This complex web of social and economic relations is what constitutes artisanal fishing communities, groups of people with their own culture, whose activities are based on a great degree of social co-operation. The highly informal nature of this assemblage makes it extremely difficult to obtain any really representative information.

Domestic market

Over the decade 1995-2005, fish exports accounted for 11 per cent of Chile's total export earnings. The artisanal fishing subsector contributes 90 per cent of the fresh fish consumed in the domestic

Conapach: The Voice of Chile's Fishers

Members of Conapach include shellfish harvesters, beach gatherers, divers, seaweed harvesters, *encarnadoras* (women hook baiters), and fishermen. Conapach provides a voice for all those who do not agree with the way the authorities manage the fishery. The fundamental aim of Conapach and its members is to ensure the sustainability of both marine resources and fishing communities.

With the mission of defending the rights of its members and improving the quality of life for Chilean fishing communities, Conapach represents fishing communities in decision-making processes that affect the artisanal fishing sector.

As a national confederation, Conapach supports the strengthening of artisanal fishing trade unions, and strives to improve them professionally, intellectually and culturally. Guided by the maxim "Unity is Victory", Conapach defends the rights of the men and women who belong to the organization.

market, thus playing a vital role in meeting Chile's food security.

But the sector has access to only approximately 28 per cent of the total catch, while generating 30 per cent of the income from fishing. According to data from the Food and Agriculture Organization of the United Nations (FAO), the per capita availability of fish in Chile for human consumption is 3.8 kg, but 20.64 kg are available indirectly as animal feed, mainly for the export-oriented salmon aquaculture industry.

In 1965 the Federación Nacional de Pescadores Artesanales de Chile (Fenaparch) was formed as a national federation of artisanal fishermen. But it ceased to exist in 1973, following repressive measures by the military dictatorship.

The fishworkers' movement was forced underground for the next 20 years, until democracy began its slow return in 1983. In 1986, following a long process of animation and consultation facilitated by

activists from the University of Concepción, a major national meeting of artisanal fishermen was organized.

The 10th National Congress of Chilean Artisanal Fishermen, following the footsteps of the National Congresses organized by Fenaparch, established the National Council of Chilean Artisanal Fishermen. Humberto Chamorro was elected as its first President.

Between 1987 and 1989, regional federations were established in the Vth, VIIIth and Xth Regions, and in 1990, the Confederación Nacional de Pescadores Artesanales de Chile (Conapach, www.conapach.cl), the Chilean National Confederation of Artisanal Fishermen, was established with the aim of grouping and representing artisanal fishermen's unions (*sindicatos*), co-operatives (*co-operativos*), and associations (*asociaciones gremiales*). Today Conapach is recognized nationally and internationally as the legitimate voice of most of Chile's 60,000 or so artisanal fishermen.

One of the first major challenges taken up by Conapach was to ensure that the interests of the artisanal fishing sector were included in the 1991 General Fisheries and Aquaculture Law. The main achievement was gaining official recognition for the 5-mile zone adjacent to the coast as an area reserved for artisanal fishing, albeit measured from baselines rather than from the most prominent points. Today, many fishermen feel that this zone should be extended to 12 miles, given diminishing resources close to shore. Currently, the main challenge facing Conapach is how to respond to a vastly different political, social, economic and resource situation than what existed in the late 1980s and early 1990s. For over a decade, successive administrations have been pushing for radical changes to Chile's 1991 Fisheries Law. This will involve far-reaching modifications to the fisheries management system, and to the property and access rights regimes, towards the adoption of more clearly defined individual property rights with a market-based allocation system.

Privatization process

Conapach has fiercely resisted this process of privatization, which is seen as

a serious threat to the rights of the artisanal fishing sector, and to the social, economic and political organizations that exist there. The privatization process has divided the artisanal sector and split Conapach, leading to the formation of a second national organization, the Confederación Nacional de Federaciones de Pescadores Artesanales de Chile (Confepach), with Humberto Chamorro as President.

The modifications to the 1991 General Fisheries Law proposed by the Chilean government aim to:

- strengthen the regulations that govern the conservation of fisheries resources, safeguarding national interests;
- improve the performance of artisanal fishing activities, and develop the sector's productive capacity;
- maximize the economic growth of the sector, enhance the value added to its products, and increase the application of best practices in the industry associated with fishery extraction; and
- improve and adapt the participation of the sectors involved in the decision-making processes.

To achieve these objectives, resource allocation will be based on a quota system, within an overall total allowable catch (TAC), proportionally allocated to the industrial and artisanal sectors. In the case of the industrial sector, quotas are allocated to individual vessel owners, through the 'maximum catch limit per vessel operator' (LMCA) system. In the case of the artisanal sector, quotas are to be allocated through the 'artisanal extraction regime' (RAE), and the new administration of President Michelle Bachelet has the task of defining how this will operate.

According to the new Fisheries Subsecretary, Carlos Hernández, there are a number of issues to be tackled before the RAE can be instituted. These include replacing the current system of regional or zonal management with a system of management by fishing grounds, with specific management plans for the resources on those grounds. The 'scientific community' will participate in defining the state of resources, and in determining quota and closed-season regimes. It will be the job of the administration to set definitive quotas based on advice given on the TAC range. This may necessitate establishing mechanisms for allocating and managing individual quotas, community quotas, or *caleta* quotas.

Great diversity

Hernandez also concedes that the sector's diversity demands that a new definition of

artisanal fishing be conceptualized, recognizing at least three main categories: subsistence, small-scale, and highly efficient.

This may require defining, for each category, the nature of the vessels and their areas of operation, and letting each sector be governed by its own set of policies. New forms of worker organizations may also have to be established that are more appropriate for fisheries management than the *sindicatos*. Other priorities for the artisanal sector include setting up auction centres where fishermen will be able to obtain better prices for their products, and establishing social security and savings schemes.

Previously, attempts were made to improve commercialization through setting up fishermen's companies, that is, by turning fishermen into middlemen to trade the produce of their former fishing partners. That move created conflicts and divisions and, in general, failed in many *caletas* across the country. An alternative idea is now being tried out in San Antonio and in the Xth Region, with the construction of artisanal fishing ports. The plan is to create a regulated market where interference and distortions are reduced. Traders will have limited access. Handling and preservation of the product will be improved, and a fish auction will be organized by fishermen's organizations, and made accessible to buyers in a regulated manner.

Recognizing the growing importance of export markets for artisanal fishing, the Chilean government is set to invest in establishing international health and hygiene standards in the development of new artisanal port infrastructure in 14 *caletas* over the period 2007-2009. The development of artisanal ports and the improved commercialization of artisanal fishery products are to be closely associated with the allocation and management of quotas. For this, new forms of more commercially oriented fishermen's organizations may need to be developed, quite different from those that were developed in the 1980s and 1990s to fight for fishermen's rights.

The formation of Conapach (and now, Confepach) and their strong presence in

Chile reflect the deep-rooted tendency for Chile's artisanal fishers to organize themselves. This tendency can be traced to the notorious 1907 massacre of saltpetre workers in Santa Maria de Iquique, when around 3,000 striking mineworkers and their families were slaughtered by the Chilean army for demanding better working conditions. After the massacre, many of those who escaped fled south and settled on the coast, in the *caletas*, where they established self-help societies. These early self-help groups provided the basis of today's artisanal fishermen's unions.

Another key to the organizational tendency of artisanal fishermen is the particular system used for remunerating their activities. The 'share system' is a horizontal form of organization based on a contract through which fishermen arrange how the benefits from the day's fishing are distributed. This is according to the contribution made by each person to the vessel, to the materials used, to financing the operation, and to the work undertaken. It is based on consensual arrangements, of short duration (the time taken up by a day's fishing) and in which every partner makes a contribution to the work, materials or capital, with the profits shared according to the value placed on the different contributions made.

The share system arrangements also apply to different functions provided through a network of horizontal relations, with a high level of risk sharing and reciprocal relationships.

The testimony of Veronica, an *encarnadora* (hook baiter) from the *caleta* of Papudo in the Vth Region, illustrates this: "There are two ways of working: one is the 'share system' (*a la parte*), the other is the 'fixed rate' (*apreciado*). In the fixed-rate system, whether or not any catch is made, you still earn four *lucas*.

More risky

In the share system, if things go well for the fishermen, they also go well for the *encarnadora* because the profits are shared, and if things go really well, you can earn even more! If the fisherman earns 20 *lucas* I get 20 *lucas* too, and if he doesn't earn anything, then neither do I. Of course, it is a more risky system. You can chose between the fixed-rate and the share

system. In general, the fixed-rate system is preferred because it is more secure: whether or not there is a catch, you always earn the same. As for me, when there is no catch, I resign myself to my fate, because this is the fisherman's way of life."

Whoever contributes to the work of fishing qualifies as an artisanal fisherman and is inscribed in the respective fishery register, and the National Register of Artisanal Fishermen (RPA). Both the boatowners and the crew, being inscribed, possess the rights to participate in the fishery. The 1991 Fisheries Law recognizes the equal right of both people and vessels to be inscribed in the fisheries register, recognizing that the qualified artisanal fishermen are the people who account for the artisanal fishing effort.

In the case of the new fisheries law approved after much polemic debate at the start of December 2002, the State, rather than trying to strengthen social capital "as an element that could contribute to the sustainability of its intervention", is working against it, disregarding the bases that sustain it.

The new law proposes that fishing rights should only be allocated to vessels. The crews' resource access rights are seen as a function of the fisheries activities they may undertake in a vessel authorized to catch a particular species in a particular area; this denies them the fisheries access rights consecrated under the previous law, for which they will now have to depend on vessel licences.

The proposed system will remove the access rights of artisanal fishermen to Chilean fisheries resources. Only the entitlements of vessel owners and shellfish divers to such rights will be recognized. This fundamentally alters the way artisanal fishing is organized, which, until now, has been based on the share system. Productive relationships are now being transformed so that the respective crews are subordinate to, or dependent on, artisanal boatowners and shellfish divers, emphasizing employee-employer relationships.

This monumental decision to regulate the functioning mechanisms and the way

artisanal fishing is organized is based on the bureaucratic need to centralize vessel registration and to reduce the number of actors, while making the process as simple as possible. The de facto removal of fishermen's resource access rights will encourage a process that reduces worker's rights. It could cause unprecedented class conflicts, which may eventually lead to the breakdown of the cultural, organizational and productive composition of the sector.

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Marine pollution

Fight over, but war goes on

Chilean communities unite to fight for their livelihood rights against big business interests represented by a giant pulp firm

Saturday, 9 September 2006, was to have been a big fiesta day in Mehuín, a coastal town in southern Chile, home to a small fishing community of approximately 1,700 people. However, poor weather conditions put paid to that plan. Instead, the Mehuín Union of Women Workers was forced to limit its cultural events to a small gathering in the offices of the fishermen's union.

A few weeks earlier, on Tuesday, 15 August, fishermen from Mehuín had braved rough seas in their small launches to block vessels chartered by the Chilean industrial giant, the pulp firm called Celulosa Arauco Company (Celco). These had been commissioned to carry out an environmental impact assessment (EIA), a prerequisite for discharging waste from the Valdivia pulp mill into the sea.

According to the Chilean Navy, called in to "ensure the security of human life at sea, to maintain order and security in the maritime zone", the "sea and wave conditions in the area, with waves over 2 m, did not guarantee the safety of operations necessary to carry out these studies".

The Navy report also noted the presence of "several fishing boats, carrying rocks and lances; both these conditions pose risks for human life at sea, so it was decided to postpone work until conditions improve".

The 'Battle of Mehuín' was but a single skirmish in a war that has been waged for over 10 years on many fronts, with much at stake, and with a great amount of collateral damage.

It has been a dirty campaign too, with allegations of complicity, bribery and intimidation. For the moment, there is a

tense ceasefire, but hostilities could be resumed at any moment.

According to Juan Carlos Cardenas, Director of Ecoceanos, an independent, non-governmental organization (NGO) based in Chile, working to promote conservation and sustainable management of coastal and ocean ecosystems, "Local communities face a desperate situation of institutional malfunction, where the authorities have not been even-handed." Given the complete lack of trust in the way environmental regulations are implemented, Cardenas explains that a new strategy is required. "Celco operates an export-oriented industry, requiring international markets. We are making an international appeal to stop this barbarous proposal to discharge toxic waste into an area that is an important fishery. The political fallout could be high," warns Cardenas.

The saga being acted out in Chile's southern regions pits local communities of fishers and indigenous people against the might of Celco. The company, whose consolidated sales represent five per cent of Chile's gross domestic product, is owned by the Angelini family's forestry business, and forms part of the giant Copec Oil Company (www.copec.cl), Chile's largest privately owned company. With consolidated assets worth \$6,432 million, 68 per cent of which form part of their forest ventures, Copec controls around 70 per cent of the Chilean pulp used for newspaper production.

Large footprint

Celco's Valdivia plant is located in the small commune of San José de la Mariquina, some 800 km south of Santiago, but its footprint is both large and heavy. Production at the plant requires

The Battle of Mehuín

At 8 a.m. on Tuesday 15 August 2006, Mehuín was awoken by the alarm calls of watchmen on the hills, announcing the arrival of vessels chartered by Celco. Twenty minutes later, Mehuín fishermen were in their boats and on the scene. They were joined by 30 more launches from the *caleta* of Queule, in the South of the IX Region, who also oppose the duct.

In addition to the two large tugboats, the fishermen found themselves facing the Navy patrol vessels *Chiloé* and *Antofagasta*, and a warship with more than 100 marines, including hooded men with weapons ready. All this was filmed on video by the fishermen (see <http://www.mehuín-Celco.blogspot.com/>), and shown in the local community, provoking outrage at the Chilean Navy for its overt support of Celco.

Accounts of the battle vary. Fishermen accuse the Navy of heavy-handed tactics and intimidation, with shots being fired indiscriminately by hooded gunmen. By 5 p.m., thanks to the interference by the fishermen, the two tugboats had withdrawn northwards, and the Navy vessels to Valdivia.

For their part, the Navy claimed that they were called in by the authorities in San José de La Mariquina to maintain safety at sea. An official statement noted that the Navy had been called in to “ensure the safety of the personnel and equipment of Ultragas S.A. while they carry out

the technical investigations necessary to prepare their EIA”.

Eliab Viguera, the spokesperson for the Marine Defence Committee, questioned the role taken by the Navy in the conflict, pointing to the lack of transparency, and the lack of any official announcement prior to their surprise deployment.

Joaquín Vargas, President of the Mehuín Fishermen’s Federation, pointed out that the swift action by the fishermen had prevented the environmental impact assessment (EIA) required by Celco being carried out.

“The Celco vessels were 3-5 miles outside the area where they have to carry out their studies. But they should not be allowed to enter there, because it is a management area belonging to the fishermen. We are defending our right to work in a pollution-free environment. It is the role of the State to ensure that, to safeguard the patrimony of all Chileans, as stated in the Constitution.”

According to Vargas, the EIA carries absolutely no guarantees for the fishing community, as the projects are always approved. “Where cellulose plants operate with EIAs, the results are plain to see. Close by, the situation in the Cruces river in Valdivia is a case in point. There used to be swans there, but they have flown away. However, we fishermen have no wings to fly.”

thousands of hectares of pine and eucalyptus plantations, with an annual demand for over 2,000 ha worth of production.

Using 950 l of water per second for fibre whitening, it discharges a similar quantity of liquid residues and byproducts. Its potential impact on local communities, particularly on the indigenous Mapuch, whose traditional livelihoods depend on access to aquatic and forestry resources, is enormous.

The Valdivia plant is seen locally as the tip of the iceberg of a development that will generate widespread misery, environmental destruction and the devastation of Mapuche communities, leading to the displacement of thousands of indigenous people and poor *campesinos*

(farmers or peasants). Back in the 1980s, Celco conceived the ‘Valdivia Project’—the construction of a new cellulose plant, with an investment of US\$1,300 mn. According to Ecoceanos, the installation of the cellulose plant was aided “by government policies that favour the export of raw materials with low value added; that subsidize plantations of exotic species; that protect private investment; that do not recognize the historic rights of indigenous people to the areas where single-species plantations of pine and eucalyptus have been established; and that are blind to the need to protect native woodlands.”

Commenting to the Inter Press Service (IPS), Lucio Cuenca, the Director of the Latin American Observatory for Environmental Conflicts (OLCA),

observed: “In Chile, political decisions continue to take precedence over technical, environmental and social considerations. What we are seeing here is a dictatorship of investments and of power of the big corporations, with the government’s complicity.”

The project was finally approved in 1996, with Celco’s waste disposal options being either to discharge into the Cruces river, or into the sea some 35 km away. Discharging their effluent into the river required the installation of expensive tertiary waste treatment equipment. The cheapest option for Celco was, therefore, to dump its effluents into the sea by constructing a pipeline.

Celco targeted the Bay of Maiquillahue as the place to discharge the factory waste. Around 600 families in Mehuin depend on fishing for their livelihoods. There are also 13 other communities in the surrounding area, comprising some 3,000, mainly indigenous, Mapuche-Lafkenche people, who depend on fishing and farming. The bay area is also a favoured local tourist spot, and fishing and tourism are important local activities, but their future is threatened by the plans to dump toxic waste in the bay.

The planned route for the pipeline goes right through the areas used by the indigenous people and claimed by them

as their traditional territories. Anticipating opposition from local groups, Celco has applied for mineral prospecting rights. This entitles the company to privileged access to these areas, and effectively prevents any other economic, infrastructure or cultural initiatives from coming up. The owners of the land must facilitate the activities of those who are granted such rights. Celco’s objective in gaining these rights is to pre-empt the local communities from doing so and blocking their duct.

Thanks to the combined campaigns and actions of the local communities, indigenous people, NGOs and environmentalists, the implementation of the EIA has so far been blocked, and the pipeline project has not been able to proceed.

On 16 October 2006, Fernando Meza, Chair of the Environmental Committee of the Chilean Chamber of Deputies, declared: “The (Celco) company came to the region promising to generate employment with a clean industry that would promote development... but instead they caused considerable environmental damage to the River Cruces wetlands. Then, not only did they attempt to discharge their waste into the sea, but they also proposed to construct a waste pipe across 30- 40 km of indigenous community territory, which they decided to install without carrying out an

environmental impact study that requires that all those affected be consulted.”

According to local environmentalists, the factory wastes destined for the sea “contain high levels of organochlorides, highly carcinogenic and non-biodegradable chemicals.” They claim that these will accumulate “in the tissues of filter feeding organisms (like the local shellfish resources) and fish, and would then be passed on to the humans who ate them. Due to their toxicity, persistence and bioaccumulation, these head the list of substances that are most noxious to the marine environment.”

Fernando Meza adds: “We know that other, closed-circuit technologies exist that purify the water so that it can be reused as many times as required, rendering it harmless, and this simply requires greater investment. I can’t understand how a company that earns US\$200,000 daily or around 100 mn pesos, does not have the wherewithal to invest and leave everyone in peace, without trying to dump its waste in the sea.

There is no doubt in my mind that this will alter the ecosystem. If heavy metals were found in the organs of swans then it is logical that this will surely happen with the marine fauna. Above all, we have a duty to protect the resources.”

The atmospheric pollution of the plant is also considerable. Ecoceanos reports that the Valdivia plant incinerators produce 12 tonnes of sulphur dioxide daily. When in contact with the constant precipitation of the region, this produces acid rain that pollutes the native forests, plantations, animals and the people who consume the food from the area.

According to Ecoceanos, “Investigations made by the authorities found that bad odours were not the only problem. The plant had absolutely no systems for controlling, reducing or monitoring the gases produced. Moreover, the plant had begun operating in February 2004 with no inspection from the department of public works, without any payment of licence fees, and with no public health authorization, in flagrant disregard of official requirements”. According to

another source, “Celco attempted to enter Mehuín by land and sea in order to carry out their studies, but found an organized community that had managed to make a major part of the public aware of the issue. The government’s action was laid bare to the country and part of the international community. They looked on with concern at the environmental and indigenous conflicts and were able to witness the strong repression carried out in some Mapuche areas. Faced with imminent defeat, the company and the government negotiated a way out of the conflict: to approve the project with the initial alternative proposed in the first project, that of discharging effluents into the Cruces river, using a more modern treatment that would ensure minimal pollution.”

The factory was also found to have several additional waste pipes that were not included in the original EIA, which, according to studies carried out by the Austral University of Chile, contracted by the National Environmental Commission (CONAMA), were responsible for the deaths of hundreds of black necked swans and other animals, fishes, and aquatic plants in the Carlos Anwandter Nature Sanctuary.

This sanctuary covers more than 12,000 acres of wetlands along the Cruces river, and is an area designated as a wetland of international importance under the Ramsar Convention (Ramsar Site No. 222). The President of Chile, Michelle Bachelet, elected in December 2005, has yet to reveal her hand. Her environmental adviser, Manuel Baquedano, has described the pipeline project as “inevitable”, but the activities of Celco have now become a national issue, and will be subject to the scrutiny of the Chilean Chamber of Deputies.

Fernando Meza questions: “How can anyone decide that dioxins, toxins and all kinds of waste can be dumped in the sea here, but not there? The environment is a continuum and what happens in the north could affect the south. The local authorities have failed to understand that this is a national issue. It is not that we have become crazy about attacking Celco... we would do the same with any company that did not respect the

environmental laws, the communities and their way of life.”

While locally the combatants are preparing themselves for the next encounter, Juan Carlos Cardenas of Ecoceanos feels that the campaign must also be taken to Europe. “We are working with the International Collective in Support of Fishworkers, an organization that has strong ties with Chilean fishing communities and CONAPACH, the National Federation of Artisanal Chilean Fishermen. We plan to provide information to the European Parliament and other democratic bodies, which, along with the provisions of the European Union(EU)-Chile Association Agreement, can be used to challenge Celco in the market place,” he says.

The aims of the EU-Chile Association Agreement include “to encourage conservation and improvement of the environment, prevention of contamination and degradation of natural resources and ecosystems, and rational use of the latter in the interests of sustainable development” (Article 28, Title II, Part III (Co-operation)). Cardenas, therefore, envisages establishing a process for formal dialogue between coastal communities, artisanal fisheries, social organizations and indigenous people in Chile and European civil society organizations, integrated into the work of the EU-Chile Joint

Parliamentary Committee. CELCO’s activities work against the achievement of this objective, and this could lead to a blacklisting of their products in Europe as well as a consumer boycott. As CELCO’s paper products are mainly destined for the export market, a consumer boycott could have a significant effect.

In Chile, the outcome of the work of the Environmental Commission of the Chilean Chamber of Deputies could also play a vital role in influencing what action is taken both locally and in Europe.

Cardenas also identifies the Organization for Economic Co-operation and Development (OECD) as a potential ally. “The OECD has been very critical of Chile’s environmental record, where Chile’s environmental and labour standards fall short of the OECD criteria. We plan to put the Celco project before the OECD,” says Cardenas. It remains to be seen whether due process at the national level, and international pressure can be combined to safeguard Chile’s marine environment and the livelihoods and well-being of the current and future generations that depend on it. ¶

This report has been compiled by Brian O’Riordan (briano@scarlet.be) from various sources, including the websites of the Rain Forest Movement (http://www.americas.org/item_29197), Ecoceanos (<http://www.ecoceanos.cl>), Mawida Ngen (<http://mawidangen.blogspot.com/>), José Araya Cornejo (<http://www.wri-irg.org/nonviolence/nvse23-es.htm>) and Conapach (www.conapach.cl)

In the throes of birth pangs

Sifting through accusations and recriminations, the long and the short of Chile's new fisheries law are outlined here

It has been a long and difficult birth for Chile's new fisheries law. And if the recent bitter public disputes recorded in the Chilean press are anything to go by, the birth pangs are far from over.

The new law establishes a system of individual transferable quotas (ITQs) for Chile's most important commercial fish stocks. Its conception was prompted by the crisis in the industrial fishery caused by gross overcapacity and the associated problem of the 'race to fish'. The new law also has major implications for the Chilean artisanal fishing sector.

The passage of this law to privatize access rights to Chile's fishery resources comes at a time when Chile has just signed, or is in the process of signing, a large number of free trade agreements (FTAs). As well as providing market access for Chilean products to over 1.2 billion consumers in Asia, Europe, North America and Latin America, these FTAs also provide the possibility for direct foreign investment in Chile's fisheries—and fish quotas. This has set alarm bells ringing in the artisanal fishery, where there is a fear that Chilean fish stocks will be bought up by foreign investors, transforming this independent sector into a source of cheap labour.

The first birth pangs were felt in January 2001 when a 'transitory' law was enacted for two years, valid until 31 December 2002. This established transferable catch quotas, to be allocated to individual boatowners, for Chile's fully exploited fisheries. These fishing quotas were only applicable to industrial vessels, that is, those over 18 metres in length. The law was designed as a temporary breathing space for discussions and negotiations to build consensus around a more complete law—the so-called 'long law'.

However, the passage of the long law through the Chilean parliament became bogged down, with over 900 amendments proposed. In mid-2002, aware of the approaching deadline of 31 December, the government proposed that the transitory law be extended for a 10-year period. This so-called 'short law', *inter alia*, established an 'artisanal extraction regime' through which a proportion of the quotas are allocated to the artisanal fishing sector (to organizations, individuals or fishery enterprises). In the meantime, the long law will next be presented to the Chilean parliament in September 2004.

The birth of the new bill has caused deep divisions within Chile's artisanal fishing communities. It has also created new strategic alliances between actors in the artisanal and industrial fishing sectors, where industrial companies lease part of their quota to the artisanal fleet that fish in the 5-mile reserved zone—the first tentative step towards feudalization.

The birth process has also continued to exclude Chile's original fishing people from legal access to the sea. The Lafkenche and the Mapuche-Huilliche communities have long livelihood and cultural traditions associated with the sea, shellfish gathering and fishing. These traditional community-based rights are not recognized by Chile's fishery law, which rules that only formal syndicate or *gremio*-structured artisanal fishing organizations may have fishing rights.

Livelihood source

Illustrative of the divisions and controversy surrounding the law is the fishery for common hake (*Merluccius gayi*, known locally as *merluza común*). Popularly called *pescada*, this is Chile's most widely eaten fish, and a vital source of livelihood for some 14,000 artisanal

fishermen in Chile's central and southern regions.

Under the provisions of the short law, 35 per cent of the common hake quotas are allocated to the artisanal sector. However, it is reported that catches have dropped so low that many artisanal fishermen are currently receiving income support from the government to compensate their loss of earnings.

Likewise, 900 processing workers are reported to have been laid off by companies unable to obtain sufficient raw material, and a further 300 workers have not had their contracts renewed.

According to a recent report by the University of Concepción, the methods used to estimate common hake stocks are fundamentally flawed. It claims that there is roughly only half the quantity of hake in Chilean waters as indicated in the official statistics of the Institute for Fisheries Promotion.

This claim has been hotly disputed by the Institute of Fisheries Research (Inpesca). While acknowledging that there may be some environmental factors acting on hake stocks, Inpesca says that there is no problem of overexploitation or faults in the stock evaluation methods. One of the main environmental factors acting on the hake is held to be the widespread

invasion of squid. These are said to be the cause of significant predation (and non-fishing mortality) on hake stocks.

Cosme Caracciolo, the president of the national artisanal fishermen's organization, CONAPACH, lays the blame for the hake declines firmly on the system of fisheries management based on ITQs. He also attacks the government's limited capacity to monitor and control the fishery, since it only monitors what is legally landed. Caracciolo claims that the fishing methods used by the industrial sector (bottom and mid-water trawling) are non-selective and highly damaging to the fishery. He points out that these make large catches of hake below the commercially optimal size, which are discarded at sea. Caracciolo claims that if undersize hake discards are included, catch rates would be at least five times what are currently recorded, and that this is placing unsustainable pressure on the hake biomass. It is also noteworthy that while artisanal fishing operations are restricted to designated areas where the vessels are registered, the industrial fleet is free to migrate up and down the coast, and to land wherever they choose. This makes the industrial operations particularly difficult to control.

Artisanal fishers

Faced with an absence of hake, and with an abundance of squid, many artisanal fishermen in the central region, notably

around San Antonio and Valparaiso, have made significant investments to catch, process and export squid.

Given the relatively low value of squid, such operations require high catch rates. According to CONAPACH, every tonne of squid caught incurs costs of 30,000 pesos (some US\$40), while earning 50,000 pesos (some US\$70). This excludes crew wages of around 20,000 pesos (some US\$27), and leaves little margin.

The fish law row has recently intensified due to the approval of an amendment to the short law (Resolution 174). This gives the Fisheries Sub-secretariat discretionary powers to allow foreign fleet access to squid within Chile's exclusive economic zone, granting licences for up to one year. Furthermore, on June 1 2004, through several resolutions, the Fisheries Sub-secretary granted fishing licences to a number of industrial vessels to catch squid for fishmeal.

These developments directly undermine the efforts being made in the artisanal sector to catch, process and export squid. Also, as noted by Caracciolo, "the artisanal fishermen are catching squid for direct human consumption, while the industrial operations are reducing it to fishmeal for salmon aquaculture." To emphasize this wasteful use of resources and to promote their cause, CONAPACH celebrated the feast of Saint Peter on June 28 by offering dishes prepared with squid caught by the artisanal fishermen.

The long and the short of it seems to be that Chile's artisanal fishing sector is being severely restricted by the new law, and unfairly discriminated against in the face of lax controls over industrial operations and foreign competition. The new baby of the Chilean fisheries law would also seem to be exacerbating an intense sibling rivalry and internecine conflict that is dividing the sector and threatening the artisanal fishers' way of life. Privatization of fisheries may be good for business and foreign trade relations. But can it help conserve fish stocks, maintain employment, reconcile conflicts of interest and allocate resource benefits equitably? Surely these should be the priorities of any new fisheries law. 🐙

This article is by Brian O'Riordan (briano@skypro.be) of ICSF's Brussels office

Talking the fishing

Cosme Caracciolo, President of the National Confederation of Chilean Artisanal Fishermen, criticizes the EU-Chile fisheries agreement

Recently, the Brussels Office of the International Collective in Support of Fishworkers (ICSF) and the Coalition for Fair Fisheries Arrangements (CFFA) hosted a visiting delegation from Chile.

The two delegates were Juan Carlos Cardenas, Director of Centro Ecoceanos (and a member of the coastal network 'Parlamento del Mar') and Cosme Caracciolo, the President of the National Confederation of Chilean Artisanal Fishermen (CONAPACH).

Cardenas and Caracciolo had been invited to Rome to participate in the NGO Forum for Food Sovereignty, an event organized by civil society organizations in parallel with the 'World Food Summit: Five Years Later' conference held at the headquarters of the Food and Agriculture Organization of the United Nations (FAO). As they were in Europe, they took the opportunity to visit Brussels, the institutional headquarters of the European Union (EU).

The recent signing of an 'Association Agreement' between the EU and Chile, and concerns that the fisheries aspects of the agreement would prejudice the rights and situation of the artisanal fishing communities was the reason for their visit to Brussels.

The signing of the agreement comes at a time when the Chilean government, despite considerable opposition, is trying to push through a new fisheries bill that will privatize access rights to fisheries resources.

In this interview, Cosme Caracciolo provides some insights into the reasons why the 40,000 fishermen and seaweed

harvesters, together with their families and coastal communities, are concerned about the agreement with the EU.

Q: After spending a week here in Brussels meeting with Commission officials and parliamentarians, how do you now feel about the agreement with the EU?

A: When I visited the European Parliament, I was amazed to learn that the elected representatives of the European people were as ignorant as the Chilean Parliament about the content of the agreement. Despite its wide-ranging implications, the Fisheries Committee of the European Parliament had not received the full text, let alone been briefed about the agreement. I thought that such things only happened in Chile!

I was also impressed by the lack of transparency, and by how much misinformation there is about the agreement. For example, I was very surprised to hear the response of Spanish Fisheries Minister to the parliamentary questions on the agreement. He claimed that the agreement does not grant access, but only facilitates exports. He then went on to say that the closure of Chilean ports to EU vessels fishing in international waters meant that repairs could not be carried out, refuelling could not take place, and that sick fishermen could not be disembarked. The ports' closure only applies to the landing of fish catches. His claims about sick fishermen, refuelling and repairs are completely untrue.

I was also very interested to learn that a Sustainability Impact Assessment (SIA) will be carried out on the agreement, but so far, the fishing communities of Chile

have not been consulted. There also needs to be a much greater emphasis on the shared responsibilities of the EU and Chile on issues like resource conservation, respect for food security and the livelihood rights of the coastal communities, and, most importantly, promoting sustainable development of the fishery for the benefit of the Chilean people. So far, dialogue on such issues seems to have been lacking.

We are also very interested to learn that the agreement contains provisions for co-operation. We would like to know how the artisanal sector can benefit from these provisions. I feel that we have made some important contacts here in Europe, and I am looking forward to meeting European parliamentarians when they visit Chile next year to provide them with direct experience of our sector. But I also feel that there is much to do to raise awareness about this agreement at the grass-roots level, and to mobilize opposition against its negative aspects.

Q: How will the agreement affect you and your members?

A: There are three main aspects that concern us. First and foremost is the timing of the agreement, which coincides with the latest attempt by our government to introduce individual transferable quotas (ITQs). This new bill, if passed, will effectively exclude the

artisanal fishing sector from the system. In the first place, the allocation mechanism is highly unjust; secondly, it will put into the hands of a few industrial companies resources that are the patrimony of the Chilean people; thirdly, the artisanal fishworkers lack the necessary capital to compete in the quota market; and fourthly, it will open up Chilean fishery resources to international investment. The impact of this will be to transform artisanal fishermen and their families into a cheap source of labour for the fishing and aquaculture industries.

What you also have to remember is that artisanal fisheries in Chile provide some 60,000 jobs directly in fishing, shell-fish collecting, seaweed harvesting and associated activities. The fish produced by the artisanal sector is for direct human consumption. It provides 90 per cent of the fish consumed by Chileans, 12.4 per cent of their animal protein intake, and, in addition, 25 per cent of the export earnings from fishery products.

Q: But won't the ITQ system only apply to a few species of interest to the industrial fishery?

A: The ITQ system will be applied to the resources classified as fully exploited. These are resources that are fished by both the artisanal and industrial sectors. They include two species of key importance to the artisanal fishery: the horse mackerel

(*jurel*) and hake (*merluza*). In both cases, due to the informal nature of the sector, the landings have not been fully recorded, and this puts us at a distinct disadvantage when it comes to quota allocation. In the case of the hake fishery, there are many *caletas* (fishing centres) that are totally dependent on this one fishery at all levels, from catching to processing, marketing and distribution. Depriving them of access rights by placing severe quota restrictions threatens the very survival of such communities. That is why the fishing communities are on the streets in protest against this system. It is unjust, and it will deprive them of their rights to food and livelihood.

Q: What about the 5-mile reserved zone? Doesn't that provide you with some security?

A: The 5-mile reserved area is very important as a conservation area for fish species that breed close to the coast, and that spend the early parts of their lives there. We have, therefore, campaigned hard to prevent the use of destructive fishing practices, such as trawling and purse-seining, in the five-mile reserved area.

However, there seems to be a misconception in Europe about artisanal fisheries in Chile, where the sector is well-developed, highly diversified and heterogeneous. In fact, only about 20 per cent of the artisanal fishing operations are carried out within the zone.

With vessels of up to 18 m, with the capacity of spending several days at sea, many of the artisanal fishing operations occur outside the 200-mile exclusive economic zone. At the same time, in many areas, you will find small communities living at a subsistence level, gleaning what they can from the sea within a few miles of the coast.

The lack of regulation in the fishery is also of great concern to us. In fact, the main regulations governing the artisanal sector are self-imposed. We have banned trawling as an artisanal gear, to aid the recovery of species. Purse-seining is also banned for similar reasons. In the case of the drift-net fishery for swordfish, we restrict the net length to 1,000 fathoms

(about 50 m). In the long-line fisheries, we also have restrictions on the number of hooks.

Q: I understand that your family has a long history of fishing.

A: My grandfather, my father and uncles were all fishermen, and I too worked in this fishery from an early age. Sadly, this once-rich fishery is now in decline. Despite this, I have learned that the EU wants to undertake research to clarify whether or not the resource is overexploited! In Chile, we have knowledge and experience learned over several generations. If you want information, come to us! Also, the artisanal sector is quite capable of supplying the EU market with prime fish. Tell us what you want, and we will supply it!

This interview with Cosme Caracciolo, President of CONAPACH, was conducted by Brian O'Riordan (briano@skypro.be) of ICSF's Brussels office

Fisheries access agreements

A Trojan horse

A new deal between the EU and Chile shows how future fisheries access agreements may now shape up

A new deal recently concluded (but not yet ratified) between the European Union (EU) and Chile covering trade, political dialogue and co-operation, shows how future fisheries access agreements concluded between the EU and its Southern partners may shape up. The portents are disturbing: fisheries resources are likely to be used increasingly as the bargaining chips against which trade concessions (particularly concerning market access) are to be negotiated.

On 17 May, following the Madrid Summit between European and Latin American heads of State (the II EU-Latin America Summit), the signing of an 'Association Agreement' between Chile and the EU was announced. The agreement provides a framework for free trade, investment, co-operation and political dialogue in a number of sectors, of which fisheries is but one.

In April, when agreement was reached at the political level between the EU and Chile, Commissioner Lamy boasted that the negotiations had delivered "the most ambitious and innovative results ever for a bilateral agreement by the EU", describing it as a "fourth generation plus" agreement. As far as fisheries is concerned, this is a major new development. It is the first time that fisheries access for the EU, on the one hand, and export tariff concessions for a third country, on the other, have been included as part of a package deal.

Up to now, formal EU fisheries access agreements with developing countries have been on a strictly sectoral basis, involving 'cash for access', often described as 'first-generation agreements'. The only second-generation fisheries access agreement (vessel

transfer through joint ventures) concluded by the EU was with Argentina in 1992. This agreement was to prove disastrous for the Argentine hake fishery and, prior to the agreement's conclusion in 1999, the Argentine authorities were forced to take drastic action to prevent complete resource collapse. The agreement has not been renewed, and neither has any other second-generation agreement been subsequently concluded.

The first concrete indications of how subsequent generations of fisheries access agreements would shape up came during the negotiations between the EU and South Africa on the conclusion of a 'Trade, Development and Co-operation' agreement. In this case, the EU had pressed for a fisheries component to the agreement that made export tariff concessions for South African fishery products conditional on South Africa signing a fisheries access agreement acceptable to the EU. So far, South Africa has declined to be bowed by EU pressure. It must also be noted that making resource access contingent on market access directly goes against the FAO's Code of Conduct for Responsible Fisheries (Articles 11.2.7 and 11.2.8).

A further development occurred earlier this year in June, when EU foreign ministers unanimously approved a far-reaching mandate for the European Commission to negotiate 'Economic Partnership Agreements' (EPAs) with 76 African, Caribbean and Pacific (ACP) countries.

Major shift

According to Commissioner Lamy these agreements will "mark a major shift in the Community's trade policy towards deeper economic relations with developing countries". These EPAs will

Demands of Chile's Fishworkers

At the political level, the agreement makes resource conservation and sustainable and equitable fisheries management, responsibilities shared by the EU. The artisanal fishermen, therefore, demand that the European parliaments, institutions and civil society ensure:

- the application of the precautionary principle to the fisheries protocol in the EU-Chile agreement so as to avoid irreversible damage to Chile's marine resources, to the artisanal sector, and to the food security of the local population;
- that, as proposed by the European Commission in its Communication on

Fisheries and Poverty Reduction, information about the agreement, particularly the fisheries protocol, be diffused in such a way as to enable the professional organizations in the artisanal sector to analyze its content and potential social, economic, environmental and cultural impacts;

- that the ratification of the EU-Chile agreement includes measures that guarantee sustainable marine resource and ecosystem management, defend the rights of coastal communities and the artisanal fishery, and sustain the contribution of fisheries to local food security.

include a comprehensive package of aid and trade measures where, no doubt, attempts will be made to make export tariff concessions conditional on fisheries access for the EU long-distance fleet.

This points to the EU-Chile agreement becoming a blueprint for future fisheries access agreements. In the Chile case, there are two main components dealing with fisheries. On the one hand, a protocol on fishing enterprises establishes the possibility for European investors to purchase 100 per cent ownership rights in Chilean fishery enterprises, on a reciprocal basis. On the other hand, within the trade component of the agreement, conditions for rules of origin and the removal of tariff barriers are established. Mention is also made, in other parts of the agreement, of bilateral and/or multilateral agreements covering fisheries on the high seas; developing regional co-operation in fisheries matters; and the rights and obligations of both parties under the 1982 United Nations Convention on the Law of the Sea.

The protocol on fisheries enterprises has five main conditions governing:

- ownership and control, which, on the one hand, authorize EU companies to own a major stake in, and to control and manage, new or existing fishery enterprises in

Chile, and, on the other, authorize reciprocal rights for Chilean companies in EU member States;

- registration and operation of fishing vessels, which entitle EU companies owning Chilean companies to apply for, register and operate fishing vessels in Chile under the same conditions as Chilean companies. Reciprocal rights apply to Chilean companies owning companies registered in EU member States;
- fishing permits, which entitle EU companies to obtain fishing permits and their corresponding individual quotas (with reciprocal rights for Chileans);
- transfer of licences and vessels, which entitle EU companies to receive, by means of transfer, fishing authorizations and vessels under the same conditions as Chilean companies; and
- reciprocity, which establish the provisions for ensuring the fulfilment of the reciprocal aspects of the agreement

Tariff elimination

A comprehensive schedule for eliminating tariffs on the export of fishery products from Chile is given in a separate

Annex. For most fishery products, with the notable exception of hake and some salmon and tuna products, tariff barriers will be reduced to zero within four years, with a maximum transitional period of 10 years for 95 per cent fisheries products exported from Chile to the EU.

When the agreement was announced, Chilean President Ricardo Lagos was reported as saying that: “Today, the dreams of 15 million Chileans are with us and also the hopes of all Latin America, the natural area to expand the agreement”. Why then, just one month later, should a delegation from Chile visiting Europe, representing Chile’s artisanal fishermen and NGO communities, denounce the agreement as “a Trojan horse for the Spanish fishing industry”? Their fears are that the Chilean fishery will be sold off to gain concessions for Chile’s wine industry, and to gain tariff-free access to the European market. In particular, they fear that the initiative will undermine the sustainable development and jeopardize the food security of the Chilean people.

The agreement is based on three main principles that, respectively, refer to the respect for democratic principles and fundamental human rights; the promotion of sustainable economic and social development; and good governance. Despite this, during the negotiating process, coastal community

representatives, indigenous people who depend on fishing, and artisanal fishermen were totally excluded from the debate. Furthermore, no environmental, social or economic impact analysis has yet been carried out on the fisheries protocol of the agreement. This risks causing a resource crisis and the disappearance of their sector.

The trade deal with the EU is directly linked to the Chilean government’s initiative to privatize fishery resource access rights through the introduction of individual transferable quotas (ITQs). On 11 June, the Chilean government submitted a draft bill to the parliament, called ‘Limite Maximo de Capturas por Armador’ (maximum catch limits for boatowners). The parliament must vote on this bill, before 31 December. In conjunction with the establishment of the EU-Chile agreement, from 1 January 2003, the introduction of the ITQ system will also allow a trade in licences and fishing quotas between the large Chilean industrial operators and future European investors.

Fisheries protocol

As noted above, the fisheries protocol in the agreement gives European investors the right “to apply for, register and operate a fishing vessel under the same conditions as Chileans, and to receive, by means of transfer fishing authorizations and vessels, and their corresponding

individual quotas". Thus, if ratified by the Chilean president in October, the EU-Chile agreement will enable European (mainly Spanish) fishing companies to invest in Chilean quotas, with the same rights as Chileans, namely, to buy, sell, trade, speculate on, lease or mortgage fish quotas.

The ITQ system will initially be confined to the fisheries classified as 'fully exploited'. These stocks include species fished jointly by both artisanal (for local food supply) and industrial sectors (for reduction to fishmeal). The bycatch from the industrial sector on these species includes as many as 30 species of prime fish targeted by the artisanal sector.

The initial quota share will be based on historical catch records, with the lion's share going to the industrial sector. The quotas are to be allocated for 15 years on a renewable basis. A massive invasion of European vessels into this fishery risks marginalizing even further the artisanal sector and promoting fishmeal production over human nutrition.

European companies will also have open (and free) access to 'underexploited' Chilean fisheries resources. These include more than 90 species of high-quality white fish species of high commercial value, which form the backbone of the artisanal fishery and of local value-adding processing plants.

The removal of tariff barriers on salmon from aquaculture will promote significant production increases in Chile, with negative impacts on the coastal environment (pesticides pollution, escaped salmon that destroy local fauna, etc.). The increasing occupancy of the coastal area by salmon aquaculture also affects the access rights of coastal communities in the coastal zone. The EU has undertaken to promote a responsible approach to fisheries management at a global level and to make sure that, in its relationships with countries in the South, the needs of the coastal communities and of the local population are respected and protected. It is essential that these principles are put into practice in the proposed EU-Chile agreement, which is currently on the table, as well as in future

The Privatization Process

In 2001, the Chilean government instituted a 'transitory fishery law' that established individual non-transferable quotas. This law has already enabled the industrial sector to obtain the lion's share of the quotas.

In the case of one of the largest Chilean fisheries, for horse mackerel (*Trachurus murphyi*), the industrial fishery sector obtains 98 per cent of the global annual quota. The allocation of quotas is based on the catch track record over the last five years. Apart from the commercial catches, the industrial fishery has the right to include a whole series of catches, including those taken for scientific purposes. On the other hand, the catches of the artisanal fishery, because of its informal nature, have not been fully registered. As a result, the artisanal fishery has only been able to obtain 2 per cent of the global quota in this fishery, which is insufficient to maintain the levels of its activities. The artisanal fishery for horse mackerel is an important source of local food security, while the industrial fishery transforms this fish into meal for animal feed (and takes a large bycatch of species important to the artisanal sector).

fisheries access arrangements that may become part of the EPAs negotiated between the EU and 76 ACP States.

Given the experience to date with the EU-Chile agreement, it is likely that future fishery access agreement negotiations will be surrounded in commercial secrecy. The danger is, therefore, that trade and short-term investment priorities will take precedence over long-term sustainable social and economic development, sounding the deathknell for artisanal fisheries in many parts of the world. 

This article is by Brian O'Riordan (briano@skypro.be) Secretary, ICSF's Brussels Office

Women in fisheries

Gender agenda

This is an account of a meeting of women in artisanal fisheries, organized by the National Network of Women: Northern Zone at Antofagasta, Chile

The First Meeting of Women in Artisanal Fisheries: Northern Zone was held in Antofagasta, Northern Chile from 27 to 29 June 2001. It attracted 37 participants from 14 women's groups belonging to all three zones of Chile—northern, central and southern—engaged in fishing, aquaculture, baiting hooks, processing and marketing fish. Nine of these groups were from the northern region. The event was organized by women members of the *Sindicato de Buzos Mariscadores* (Syndicate of Shellfish Divers) of the *caleta* Constitución-Isla Santa Maria, a part of the National Network of Women in Artisanal Fisheries of CONAPACH (the National Confederation of Artisanal Fishers of Chile).

During the workshop, women discussed their expectations from the sector and their role in promoting artisanal fisheries. They elaborated on the concept of “sustainable development” and drew up guidelines for “community, economic and environmental development”.

Various public service organizations of Region II, as well as officials from the central level, were represented at the meeting. These included officials from Sernapesca, Dirección de Obras Portuarias, (Port Works Management) Sercotec, Sernam and the UECPS (Unidad Coordinadora del Ministerio de Obras Públicas or the Coordinating Unit of the Ministry of Public Works). They expressed their support towards developing the ideas put forward during the meeting.

The meeting was part of the project “Women Weaving Networks for the Sustainable Future of Our *Caletas*”, being executed by CONAPACH with financial support from the *Fondo de las Américas*. In

January 2001, women from the artisanal fisheries sector in Chile organized themselves into a National Network and selected co-ordinators for each zone. The members of the Network have been meeting regularly, every two months, to discuss strategies to strengthen, broaden and consolidate their movement. They have worked out zonal plans to identify new women's groups, deepen ties with those already in contact with the network, disseminate information on work being carried out by the network as well as identify sources to fund the initiatives of the movement and grassroot groups.

The Antofagasta meeting, a product of these zonal-level projects, was the largest event that the National Network of Women had ever organized. It marked a milestone for the co-ordinators of the northern zone and for the Conapach Women's Network, and was an important step towards valorizing the role of women in artisanal fisheries.

One of the main tasks of the meeting was to gauge the expectations of women from such events and to discuss how these could be integrated into the workplan of the National Network of Women. The women gave practical suggestions for achieving concrete results in their respective *caletas* and suggested creating permanent channels of communication between their organizations. There was a strong sentiment in favour of holding more such meetings in future to increase communication between groups and to strengthen the movement. They also stressed the need to elect more representatives for better co-ordination.

Local contexts

Gender issues were approached within the context of legitimizing *caletas*, and looking at them as groups that comprise

both men and women. The need for women to develop their self-potential and power was stressed, and to ensure this, it was proposed that new spaces for sharing and analyzing experiences and learning from the experiences of others be created.

The women also drew the attention of authorities to illegal fishing by the industrial sector in the 5-mile zone reserved for artisanal fishing. It was evident that even if women from the northern zone, in general, are not closely integrated into the activities of *sindicatos*, they are well informed about at least two major issues: the 5-mile zone and the fisheries law.

Their interest in protecting resources, respecting closed seasons and getting better prices demonstrated their appreciation of problems arising from overexploitation of marine resources.

Having discussed the concept of sustainable development and the need to link it to the development of communities, the economy and the environment, the women identified possible areas of intervention.

For economic development, they highlighted the need to support productive projects to improve the quality of life, based on a responsible use of resources through controlling, for example, the size of fish harvested. They

also stressed the need for feasibility studies and training programmes on organizational aspects. Possible projects proposed related to culinary skills, tourism, processing and marketing of shellfish, and making diving suits, among others.

In community development, they highlighted the need for their better organization into groups and for establishing alliances with other community-based and environmental organizations. They also proposed efforts to influence public opinion about problems faced by communities, though the involvement of the media.

The various other problems they faced included: poor accessibility of *caletas*; lack of transport, especially affecting school-going children; lack of proper sewage and drinking water facilities; and poor access to health services.

They stressed the necessity for providing decompression chambers for divers exposed to pressure-related problems and a high accident rate. They also stressed that in *caletas* where there are no medical facilities, men and women need to be trained to provide first-aid to victims of accidents, either at sea or in the *caletas*.

School dropouts

The women expressed concern about the significant number of children who drop

out of school or repeat academic years, and they highlighted the need for nursery and other schools.

As for the environment, the women proposed two broad areas for action. First, they stressed the importance of promoting citizen's participation through the efforts of neighbourhood groups, schools and unions, and with the involvement of CONAPACH, Servicio País, and the authorities. They emphasized the need to keep the community informed about these issues through various media.

They also proposed other alternatives for improving the environment, including recycling of organic and inorganic waste, developing green belts, controlling pollution (waste water, heavy metals, dregs, etc.), effectively enforcing the closed season, protecting resources (size and quality) and promoting environmental awareness.

The Antofagasta meeting is perhaps a landmark in developing new perspectives in the artisanal fisheries sector, in general, and in efforts towards increasing the visibility of women, in particular. Although it is a fact that women are the most marginalized in terms of direct participation in artisanal fisheries in the northern zone, what is noteworthy is that they do understand the role they play in the development of the sector. They articulate the need to control and manage resources, obtain better prices and improve the quality of products. This reassures us that it is possible to succeed in promoting development initiatives for women in the sector.

Until now, the country and different public services have invested in large-scale capture and production, within fisheries, in general, and artisanal fisheries, in particular. Analyzing the existing level of development of artisanal fisheries, we think it important to integrate women through strengthening their incipient organizations and supporting their plans for socioeconomic development. In the past, although the authorities have always intended to elevate the role of the female "actor", the efforts have, for the most part, been disjointed and based on isolated activities

rather than on an integrated approach to development. The women from the northern sector of the country require support in their activities, along with their partners—husbands, fathers, companions, etc.

It is clear to women that the issue of their integration into the sector is generally glossed over by the predominantly male organizations. In this regard, we believe that we are at a juncture where there is a strong possibility for success on an issue which is highly complex in nature.

At the meeting, women suggested several development projects directed towards *sindicatos* and the various public services of Region II. We are inviting these bodies to form a working platform that could help us define strategies and concrete opportunities for the integration of women into the development agenda. ♣

This report has been filed by Jéssica Alfaro Alvarez, Co-ordinator of the Women Weaving Networks Project of CONAPACH (pescart@unete.cl)

Cooked or roasted?

A new bill, the first step towards privatization in the fisheries sector, threatens to split Chile's artisanal fishery sector

For several months now, the Chilean government has been preparing a new version of a bill to modify the 1991 General Law on Fisheries and Aquaculture. Following weeks of governmental indecision, violent fishworker protests, and controversy, on 6 December, a watered-down version was finally approved by the Chilean parliament. The project of 'Maximum Catch Limits for Fishery Enterprises', as approved by the parliament, includes three of the main industrial fisheries—jack mackerel, anchovy and sardine. Together, these account for 70 per cent of the total Chilean fish catch. Excluded from the bill are the Northern Regions I and II. Starting in Region III, the new bill will apply to all Regions south of Region II, for an initial period of two years. This article looks at the events immediately preceding the approval of this controversial bill, and some related issues.

On 15 November, only hours before it was due to be presented to parliament, the new draft bill was withdrawn, despite receiving the approval of a special parliamentary committee only a week earlier. It seems the government was highly nervous about the possibility of the bill being rejected. It would appear that they have a lot riding on it. If the bill is not passed in this calendar year, the government will not be able to propose another law for a further year.

The National Fisheries Society (SONAPESCA), the fishing industry body, has been pushing for this bill very strongly. According to CONAPACH (representing some 60,000 artisanal fishermen) its approval will effectively hand over Chile's marine resources, free of charge and in perpetuity, to the fishing industry. In its current form, the bill will effectively privatize up to 70 per cent of

the fish catch for the benefit of the industrial sector.

On 8 November, amid violent scenes outside the Chilean parliament, the Agriculture and Fisheries Committee approved the idea of passing the new transitory bill to modify the Fisheries Law. At the heart of the new bill is a proposal to introduce a new 'administrative tool' for allocating fishing quotas, using a system of 'maximum catch limits for fishery enterprises.' In other words, the new bill proposes to introduce a system of individual catch quotas. This is the fourth time in two years that such a bill has been placed before the Chilean parliament by the fisheries administration.

In the early hours of the morning of 8 November, around 900 workers from the industrial processing plants and industrial fishing fleet took up positions in front of the main entrance to the parliament. They strongly supported the bill, as it proposed to allocate quotas to specific fishing companies. They felt that this would make their jobs more secure.

Meanwhile, on the other side of the building, around 300 artisanal fishermen had gathered to protest against the new bill. They saw it as a further threat to their livelihoods, introducing allocation mechanisms that would privatize marine resource access rights, giving an even greater share to the industrial sector (See *The Other Side*, SAMUDRA Report 22, April 1999, pp 44-49).

Government criticized

The President of the Agriculture and Fisheries Commission, Deputy Guillermo Ceroni, criticized the government for not achieving sufficient consensus within the sector before putting the new bill before parliament. He said that this would

complicate the task of the parliamentarians, and had caused a regrettable split amongst the workers associated with the fishery sector.

The new bill not only creates divisions between industrial fishery workers and the artisanal sector, but also highlights a growing split within the artisanal sector itself. On the one hand, the National Confederation of Chilean Artisanal Fishermen (CONAPACH) strongly rejects any changes to the law that will lead to privatization of access rights. On the other, a recently formed alternative confederation, CONFEPACH (the National Confederation of Federations of Chilean Artisanal Fishermen), is prepared to negotiate with the government on the new bill. Not surprisingly, it is CONFEPACH, and not CONAPACH, which is represented on the government's National Fisheries Advisory Council.

This split reflects growing differences in approaches within the artisanal sector. On the one hand, CONAPACH considers coastal communities and artisanal fishermen to have basic and inalienable access rights, and marine resources as the common property of all Chilean citizens. In 1991, these rights were formally recognized in the General Law on Fisheries and Aquaculture, which established an 'Artisanal Reserve' in the 5-mile zone, where artisanal fisheries

were given exclusive access rights. However, since 1991, the Reserve Zone has been implemented more by exception than by the letter of the law. This has created significant distrust, and is the cause of growing conflicts between CONAPACH and the national fisheries administration.

In the case of CONFEPACH, it would seem that the leaders are much more commercial in their approach. They essentially represent the small enterprise sectors that have prospered in recent years. They see no contradiction in forming alliances with other sectors in the fishery, or with negotiating with the government. They also feel that the new law gives sufficient legal protection to their rights in the 5-mile zone. In their case, it is not so much that they feel threatened by the new catch quotas, or that they disagree with privatization *per se*. Rather, they see opportunities for strengthening their negotiating position by signing up to the new bill, warts and all. Theirs would seem to be a "we'll-scratch-your-back-if-you-scratch-ours" kind of approach.

Mistrust remains

The mistrust of CONAPACH is also based on the close associations that exist between the fisheries administration and the industrial fishery. In the new administration, Daniel Albarrán, the incumbent Fisheries Subsecretary, is a

businessman with extensive interests in salmon aquaculture. Together with a number of other groups, CONAPACH has made a formal request to the Ombudsman General of the Republic to investigate their allegations concerning 'grave irregularities' and 'conflict of interests'.

Juan Carlos Cardenas of ECOCEANOS recently pointed out, "It is an extremely delicate matter that whilst a proposal to modify the General Fisheries Law to privatize Chile's marine resources is being debated in parliament, the Fisheries Subsecretariat is being directed by a businessman like Daniel Albarrán Ruiz-Calvajo, a man who has obvious interests in the sector, and who is also one of the main advocates of changing the law."

According to ECOCEANOS News, Albarrán's aquaculture business interests disqualify him from public office. In Chilean law (The Law on Administrative Probity), "It is incompatible with the carrying out of public duties for authorities or functionaries to have private interests linked to the specific aspects (of their work) or to concrete cases, which must be analyzed, researched, or dealt by them or by the department or public service to which they belong."

A statement released by the Fisheries Subsecretariat, confirmed that Albarrán was the "owner of two aquaculture concessions, which came under the administrative control of the National Fisheries Service in November 1996, and which were dealt with by the Fisheries Subsecretariat on 29 October 1999 and 30 December 1999. Processing within the Marine Subsecretariat was completed on 20 December 1999 and on the 25 February 2000."

The official statement went on to point out that since taking up the office of Subsecretary, on 13 March 2000, Albarrán had not benefited from any decision of either the Marine or Fisheries Subsecretariats.

Before being selected for the post of Fisheries Subsecretary in the new government, Albarrán was the chairman of the Salmon and Trout Producers' Trade Association, a post he held for five years.

Albarrán is also currently the owner of a 3.3 per cent stake in the salmon culture enterprise, Antarfish.

Despite official reassurances that Albarrán has disposed of all his business interests in aquaculture, CONAPACH and other fishery-dependent interest groups are highly concerned about the links between government officials and private business interests. They have asserted that the government officials responsible for drafting and promoting the modifications to the law are not impartial. Due to their links with, and interests in, the commercial aquaculture and industrial fisheries sectors, such officials are both 'judge and party', and, therefore, not impartial. They cite Albarrán as a prime example.

CONAPACH, representing fishermen, divers and shellfish collectors, is highly critical of Albarrán. According to it, concessions such as these have an average market value of around 200 million pesos (around US \$350,000). They feel that the extent of Albarrán's interests in the fishery sector disqualify him from the post of Subsecretary. As Subsecretary, it is his job to push for fishery privatization, and to accelerate the handing over of 2,700 aquaculture concessions in the south of Chile. As a businessman with investments in the fisheries sector, Albarrán is likely to benefit, both directly and indirectly, from the proposed changes in the fisheries law. In Chile, many reports have highlighted the destructive impact of industrial salmon aquaculture on environmental sustainability and social equity. In this respect, Albarrán's business interests conflict with the wider interests of Chilean society, and the longer-term interest of sustainable social and environmental development.

Three drafts

Under the previous government of Eduardo Frei, three similar draft bills to modify the General Fisheries Law were placed before the Chilean parliament. One by one, all three were rejected. They all proposed the introduction of individual transferable quotas (ITQs), to be implemented through an allocation system based on historical catch records. According to CONAPACH, this would effectively transfer the ownership of more

than 90 per cent of Chile's fishery resources, free of charge and in perpetuity, to the very people responsible for degrading Chile's fishery resources.

The new proposal, described as a 'Transitory Bill', sets out to establish 'Maximum Catch Limits for Fishery Enterprises' for an interim period of two years. Although it is a transitory measure, it is regarded as the thin edge of a privatization wedge; it is feared that these maximum catch limits will become fullblown ITQs after two years.

The new bill consists of three main parts. The first part proposes the introduction of a new administrative tool, described as the maximum catch limit for boatowners; the second part proposes that the artisanal fisheries registry be regularized; while the third part contains various provisions.

In a five-page denunciation, CONAPACH calls on the Chilean parliament to reject this new bill on the grounds of "the common good, justice, equity and, above all, to preserve fishery resources as an integral part of the national heritage."

According to Cosme Caracciolo, the new president of CONAPACH, this new draft bill "undermines the constitutional guarantee that everyone has the right to be treated equally by the law. It establishes discretionary ways of assigning fishery

resources to specific individuals, resources which, up to now, have belonged to Chilean society at large. In some instances, allocation may be based on historic catch records of boatowners; in other cases, according to the longitude of the authorized fishing area or the hold capacity of the vessels belonging to the recipient enterprises."

Caracciolo points out that, for large national and transnational companies, this project is truly the "means to the end". "This bill will result in the suspension of a number of regulatory measures of an environmental nature, as well as violating the constitutional rights of artisanal fishworkers to fish freely, undermining Article 19, No. 24 of the Constitution."

According to several parliamentarians and organizations such as CONAPACH, the draft bill represents a basic corruption of the constitution, as it assumes that fishery resources are '*res nullis*', that is to say 'belonging to no one', denying that they form part of the national heritage in Chile's Exclusive Economic Zone.

Serious threat

Juan Carlos Cardenas emphasizes, "As citizens, we would like to remind Ricardo Lagos that he is president of the whole of Chile, and not only of the Angelini Fishing Group and the salmon exporters. The current situation is a serious threat to the conservation of resources, national

marine ecosystems, national food security and the economic, social and cultural aspects of coastal community life”

Humberto Mella, the former president of CONAPACH, has announced that the organization is planning a programme of countrywide strikes and demonstrations. “If the government really wants trouble, they will be able to find it in every *caleta*,” he says.

As the Chilean summer approaches, and amid health warnings on the radiation caused by ozone depletion in the Southern hemisphere, it looks as if political temperatures will be soaring in the next few weeks. But hot enough to cook or roast the new fisheries bill? 🐙

Chile

This piece by Brian O’Riordan (icsfbrussels@yucom.be) has been compiled from ECOCEANOS News, CONAPACH documents, and other sources provided by Juan Carlos Cardenas of ECOCEANOS and CONAPACH

Feeling insecure

Women workers in Chile's fish processing factories face bad working conditions and an insecure future

The Chilean fisheries sector provides large quantities of marine products for export. This has enabled it to establish a very effective and dynamic place for itself in international trade and given it a very important role in the national economy.

Its efficient growth and expansion, particularly in the last ten years, are shown by several macroeconomic indicators: the volumes produced and exported, foreign exchange generated levels of investment, increased productive capacity, increased job opportunities.

However, these positive trends in growth and expansion hide the social processes associated with export-oriented production, where social imbalances, inequities and exclusion form an integral part.

In order to analyze and explain these issues, we have focused on the main aspects of the working conditions and quality of jobs in the sector, with particular emphasis on the section of workers from the plants processing fish for human consumption (canned and frozen products).

It is particularly important to note that the growth and expansion of the overall sector, while producing a considerable expansion of the job market, has produced jobs that are extremely insecure in nature.

They are characterized by: insecure tenure; informal contractual relationships; subnormal salaries; a bad working environment; lack of access to health or pension schemes; negligent working arrangements; and barriers to forming unions for collective bargaining. So, although there are many more workplaces available, they are not

associated with any improvements in the well-being of the workers.

It has been calculated that women represent nearly 50 per cent of the full-time workers in the sector, and in some parts of the production chain this percentage can rise to as high as 80 per cent. Some incomplete national-level statistics, which only include production units employing ten or more persons, show that there are around 10,000 full-time women workers. To this one must add an unknown number of part-time workers who can only gain employment according to production demands.

As well as being strongly biased towards employing women, the job market in the fishing industry has a marked division of labour by gender. Particular tasks are only allocated to men and others only to women. There is a tendency for the latter to be more short-term and insecure, and this is caused as much by cultural factors as by structural and economic ones.

The workers in this kind of industry are generally drawn from lower socioeconomic classes, have inadequate education and qualifications, large numbers of children, and are frequently women heads of households (i.e. the sole earner and provider).

Specific roles

They are usually best at undertaking tasks which involve handling raw material and, as a result, are assigned specific roles in the production process, including working in a production line with both unprocessed and finished products. They are able to undertake highly skilled manual tasks, which require the development of special abilities. But as these tasks are also very routine ones, they

pay low salaries and offer poor job security.

In terms of numbers and turnover of workers, it is the small-scale and low-technology enterprise sector that mainly employs part-time workers for fish processing. The processing of perishable products without access to cold-chain infrastructure, for example, obliges them to recruit this kind of manual labour.

While the job market in the fisheries sector is flexible, there are structural aspects which make the demand for manual labour vary over the year. Above all, adjustments must be made to take into account seasonal peaks and troughs in catches and production. It is also important to point out that the flexible numbers of male and female workers allows employers to evade the responsibilities and costs required in contracting a full-time workforce.

This makes possible subcontracting of workers, working out of home, and short-term contracts. This latter arrangement forms a central part of the economic strategy and commercial organization in fish processing plants.

Within the workforce there is a high turnover rate, where a large reserve of people cyclically enter and re-enter the job market, increasing the supply of

cheap labour, thus forcing salaries down. The fishing industry also uses a system of variable salary rates, designed to avoid any salary indexation, any payment of minimum wages or other employment-related responsibilities. Any increase in pay rates is almost exclusively linked to productivity, and such payments are mainly conditional on productivity and profitability performances. The working days are long, with irregular hours, and are subject to variations according to the weather, season, volume and time of fish landings, and the time of deliveries and sales.

Processing plants are characterized by a combination of significant risk factors, and the more insecure the job, the greater these are. They are related to the technical nature of the work, and associated with damage to health.

The poor quality of the jobs is also revealed by the lack of opportunities for access and use of social security and pension schemes. The irregular working periods mean that the workers' benefits are interrupted, so that they have to fall back on the public health system, pleading poverty or dependency.

Intermittent work

As for pensions, considering the intermittent nature of the work and the low and unstable incomes, it is unlikely that the workers will be able to build up

sufficient individual funds to acquire a future pension adequate for their old age.

As far as labour laws are concerned, there are particular provisions that prevent part-time women and men workers from organizing themselves into unions and collectively bargaining for better working conditions. This increases their vulnerability and reduces their rights.

The Chilean law has strengthened the concept of individual rights, and this has reduced the collective power of the unions and their capacity to negotiate. Only the unions of a particular firm can negotiate. Since part-time workers can only be affiliated to industry-wide unions, they are much more vulnerable. The most frequent complaint of part-time workers concerns salary and job security.

Full-time workers can affiliate themselves to the company unions which negotiate the conditions of work. A group of company unions can establish a federation, and a group of federations can establish a confederation.

Through increasing the flexibility of the organization of their production processes, and by reducing their labour costs, businesses are attempting to maintain competitiveness without affecting their profit rates. This is making jobs even more insecure.

In addition to the benefits provided to the industrial sector by the State through its subsidy policies on credit export promotion, etc., and through the intensive exploitation of available marine resources, the absence of effective controls and the presence of abundant and cheap workforce have made possible the growth and expansion of the sector. ♣

This article, translated by Brian O’ Riordan, has been written by Estrella Diaz, a member of Hexagrama Consultants, Santiago, Chile, Diaz is a sociologist who specializes in issues of gender and employment



Individual Transferable Quotas

The other side

Chile's experience with fisheries management is a journey from the overexploitation of a common property resource to its privatization

With a coastline of 4,200 km and an Exclusive Economic Zone (EEZ) of 3.5 million sq km in the Southeast Pacific, Chile has, during the last 25 years, developed an extraordinary multi-species industrial fishery and expanded its intensive aquaculture in what is considered to be one of the five most productive marine areas of the world, where the cool, nutrient-rich upwelling Humboldt current supports large fish populations.

During the last 26 years of export-oriented, neoliberal economic policies, over 107 million tonnes of marine resources, with an export value of US\$16,000 million, have been caught mainly from coastal waters. Most of the exports go to the Asian, European Union and US markets.

The neoliberal policy, established in the mid-1970s by the military junta, and continued by successive civilian governments, has reinforced a pattern characteristic of the Chilean economy: 87 per cent of exports are based on the exploitation of natural resources, with little value added.

During the 1980s and early 1990s, the fishing industry and aquaculture were the most dynamic sectors of the economy, with average annual growth rates of 8.6 per cent. Today both sectors together generate US\$2,000 million per year, which represents 12 per cent of the total value of Chilean exports.

Macroeconomic indicators show that in the Chilean fisheries, production peaked midway through the decade of the 1990s, when annual landings of 7.8 million tonnes per year elevated the country to third place amongst the major fishing nations, and to second place amongst the

main producers and exporters in both fishmeal and salmon aquaculture.

Today, however, Chilean fisheries are under growing threats from both overfishing by, and overinvestment in, the industrial fishing fleet. In the 1998 season, when landings fell by 47 per cent over the previous year and 4,000 jobs were lost in the industrial fishing sector, we began to see the other side of the production and financial indicators—the environmental and social costs.

Virtually all the Chilean fisheries are under severe fishing pressure: 95 per cent of them are fully exploited, overexploited or slowly recovering. The industrial fleet has a potential fishing capacity of 35 million tonnes per year, and is mainly responsible for overfishing and the destruction of marine biodiversity in Chilean waters.

This situation has led to growing conflicts between the 60,000 artisanal fishermen and the industrial fleet, particularly over the illegal and destructive fishing operations of purse-seiners and trawler fleets along the entire length of the Chilean coast.

This has also led, since 1992, to an active transfer of the overcapacity of the industrial fleet from the Southern fishery to the Atlantic and Indian oceans. There, a long-liner fleet, owned by Spanish companies under Chilean flags, are developing illegal deep-sea fishing operations in the sub Antarctic waters.

Domestic consumption

While 89 per cent of Chilean fish resources are transformed into fishmeal and fish oil for industrial use, domestic consumption has decreased over the last 25 years. At present, with an annual average per capita

consumption of 4.2 kg of marine products, 22 per cent of the Chilean population of 3.2 million people is under 'nutritional risk', mainly in those areas richest in marine resources: Iquique, San Antonio, Talcahuano, Coronel, Lota, Chiloe and Aysen.

Since the middle of the 1990s, encouraged by the UN Fish Stocks Agreement process, the different sections of Chilean society, particularly the artisanal fishworkers, the trade union organizations of crew members in the industrial fleet, and environmental organizations, have increasingly criticized the lack of transparency, participation and social equity both in the government fisheries institutions and in their policies.

It is significant that radical modifications are now being proposed to the Chilean General Law on Fisheries and Aquaculture (LGPA), adopted in 1991 (see box). There is now a proposal to privatize fishery resources through the application of Individual Transferable Quotas (ITQs) to fully exploited fisheries.

Notably, the 1991 law does not recognize any right of ownership or control over fish resources. Use rights are considered purely administrative in nature. The 'Special Fishing Licences' given are administrative concessions for individual

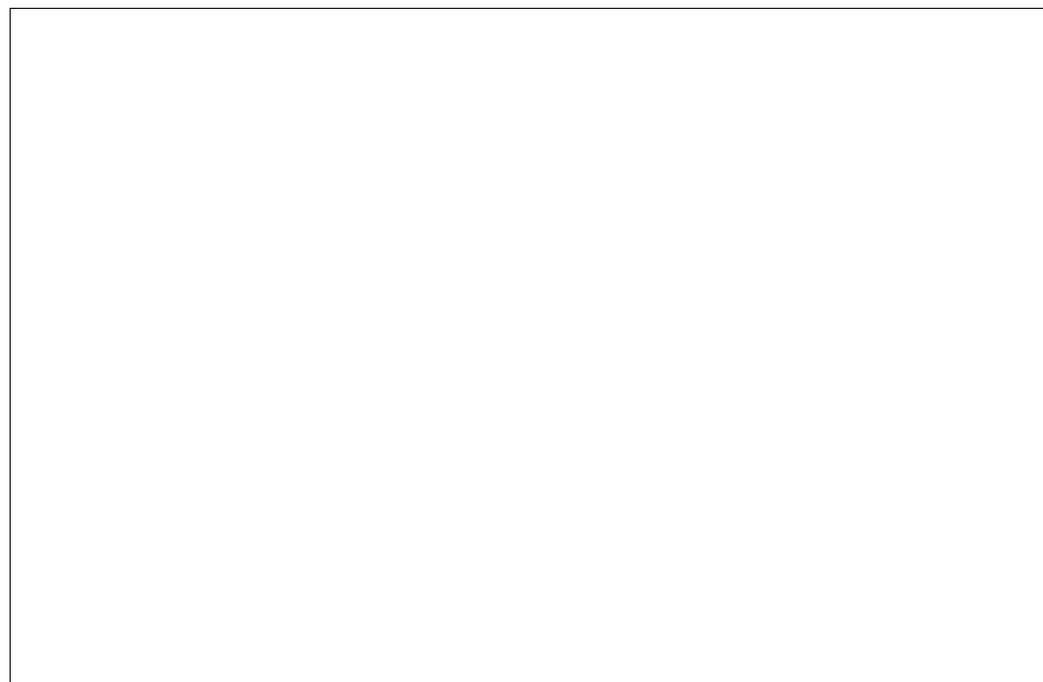
quotas, sold through public auctions, for a fixed term of 10 years.

The ITQ proposal originally came up in the context of the overexploitation of the *jurel* (*Trachurus murphyi*, commonly called jack mackerel or scad) fishery, caused by a combination of factors, including overfishing and the impact of the recent El Niño. This species represents half of Chile's total catch. The proposal was later extended to all Chilean fisheries legally defined as fully exploited, such as sardine, anchovy, common hake, southern hake, golden conger and swordfish.

A 12-member subcommission of the National Fishery Council, composed mainly of representatives or advisers from large fishmeal companies, transnational corporations and bureaucrats, was set up in August 1998. This body worked for just 55 hours to develop—without any public consultations—a proposal to privatize Chilean fisheries through the system of ITQs. This was approved on 1 September 1998 by the National Fishery Council itself, despite strong opposition from the artisanal fishermen and representatives of the industrial fleet's skippers.

Proposal supported

The proposal was subsequently supported by the President and sent to the Parliament for discussion in March 1999. To justify the proposal to privatize





Chile

The Chilean General Law on Fisheries

The Chilean General Law on Fisheries and Aquaculture (LGPA), adopted in 1991, was one of the first laws developed by the civil government after 18 years of military dictatorship. It categorizes four types of fishery regimes.

General Access regime characterized by free access. This applies to all fisheries which do not fall in any of the other categories defined by the law.

Fully Exploited Fisheries: This applies to all fisheries where fishing is at a level equivalent to the maximum catch that each species is capable of supporting, without jeopardizing its long-term conservation. Total Allowable Catch (TAC) levels are set annually for these fisheries, and are applied within a system referred to as 'Special Fishing Licences'. These fisheries are closed to new entrants-be they from the industrial or artisanal fleet-while prohibiting any increase in the size of the fishing fleet. Ninety-five per cent of Chile's most important fisheries have been placed in this category.

Fisheries under Recovery: This applies to fisheries which have been overexploited and subjected to prolonged closures, as a result of which there has been a significant recovery in stock, sufficient to allow their return to commercial extraction. This is restricted through a system of 'Special Fishing Licences', where Individual Non-Transferable Fish Quotas with a 10-year old validity are auctioned.

Incipient fisheries: This applies to fisheries where fish catches amount to less than 10 per cent of the TAC. In these fisheries, 100 per cent of the TAC is auctioned of an Individual Non-Transferable Quotas.

There is also a provision for a special category of fisheries classified as 'Fisheries Under Investigation'.

Management measures for the fishery and the TAC are established annually by the Subsecretary of Fisheries, based on technical reports and political negotiations.

Chilean fisheries, it is being claimed that the LGPA provisions are inadequate to prevent overinvestment and overexploitation in the fisheries, and that the application of ITQs will improve the economic efficiency of the fishery.

The proposal is based on the logic that only individual ownership of fisheries resources will ensure that owners conserve and manage them rationally in the long term, increasing the economic efficiency of the fisheries.

It is proposed to establish a new administrative regime, titled 'The Special Fisheries Regime', which will modify the LGPA by incorporating the ITQ system. The proposal has some basic features:

- It recognizes and assigns fishing rights *free* and *in perpetuity* to boatowners who are currently operating in fully exploited fisheries;
- It uses catch history as the basic criterion to allocate the percentage share of the TAC to fishing rights. The owner, in perpetuity, of this

individual fishing quota can divide, sell, lease, remove, or inherit it, converting it into a commodity to be commercialized in the national or international markets. No single quota owner may accumulate more than 35 per cent of the TAC for a particular fishery.

- For fisheries not previously subject to a TAC, as in the case of *jurel*, Article 40c, Paragraph 2, establishes that a fixed coefficient be used to calculate the proportion of the total fishing rights (the Total Fishing Effort) assigned to each vessel, which is based on a mathematical relationship between the size of the vessel's fish-hold multiplied by a coefficient particular to each geographic region. The use of this coefficient will enable the largest fishmeal companies in the Bio-Bio and Concepcion region, which own the greater part of the 135,000 cu m hold capacity of the purse-seine fleet, to acquire 50 per cent more quota than any other

company in the whole of the country.

The Fisheries Subsecretary will issue Special Fishing Licences to industries authorized to fish in fully exploited fisheries, allocating proportions of the TAC determined annually for the industrial sector. These licences will be issued for an indefinite period, and will be divisible, transferable, or leasable.

Each owner will decide the number and type of vessels to be used in the fishery. The vessels must be registered in the Chilean registry of fishing vessels and must comply with the laws governing fisheries and navigation.

If approved, the ITQ proposal will radically modify the LGPA, by privatizing indefinitely the common property resources of the Chilean people, without any form of social or economic compensation.

While the 200,000 people who depend directly or indirectly on marine resources in Chile have seen their livelihood threatened by overexploitation and overinvestment, no more than 13 of the largest companies (who are directly responsible for the marine resources crisis) will be the direct beneficiaries of this new law.

One of these is the Angelini Group, which now controls about 40 per cent of the fishmeal exports, using mainly *jurel*/South American pilchard (*Sardinops sagax*), *anchoveta* (*Engraulis ringens*) and *cabal/a* or mackerel (*Scomber japonicus peruaius*) resources. In turn, two other companies control 80 per cent of common hake (*Merizocins guyi*) catches, the most popular fish consumed in Chile.

A similar situation can be observed in the processing and export of fish from the southern fishery, which is based on austral hake, pink cusk eel, patagonian toothfish, southern blue whiting and hoki.

Multinationals' control

This fishery is controlled by just three transnationals: Pesca Chile (a subsidiary of Spain's Pescanova, the world largest hake producer), Endepes Ltd. (a subsidiary of Nippon Suissan Kaisha) and Frio Sur (associated with Icelander). They control 70 per cent of austral hake exports, while just two companies control over 80 per cent of patagonian toothfish (*Lissas dclius elegendoides*) exports.

The principal long-term beneficiary of the ITQ proposal in Chile is perhaps the financial sector. It has backed the ITQ proposal as a means of obtaining legal guarantees for the 640 million loans decade of 1990s to finance overinvestment in the industrial fleet fishing for fishmeal.

The ITQ system will privatize fish resources by allocating exclusive quota rights to vessel owners on the basis of the vessel's historical percentage share of the catch, based on catch records over the past three years. In this way, artisanal fishermen, and small- and medium-sized owners will be excluded from most fisheries due to their scant financial means and lower percentage share of the catch in the past. In the case of Chile, the industrial fleet officially controls 87 per cent of total fish catches.

Moreover, under the proposed ITQ system, resources classified as 'associated' species will also become part of the quota allocated. 'Associated' species refer to a large number of white-fish species, such as *reineta* (*Brama australis*), *machuelo* (*Ethmidium maculatum*) and *sierra* (*Thyrsites atun*).

Currently, associated species are the principal catch of the artisanal sector, and are the main species eaten locally and nationally. They form the basis of the artisanal fishery and are destined for human consumption. It is, therefore, of particular concern that for most of the principal species for which quotas will be allocated, there are more than 30 associated species. For example, there are 32 species associated with the *juirel* fishery, 33 with the southern hake and 30 with the golden conger or cusk eel.

It is doubtful whether ITQs will do anything other than concentrate ownership in the hands of a few industrial fishing enterprises. Since the criteria for allocating quotas under the new system will be based on "historical catch records", there will be no reduction in the overcapitalized industrial fleet, and the artisanal sector will effectively be pushed out and excluded from the fishery. The artisanal sector, which provides the greatest number of jobs and is closely linked to the regional economy, will end up with a smaller share of the fishing quota. This is likely to herald their eventual removal from the Chilean fishery.

The experience with ITQs in New Zealand, Iceland and Canada demonstrate that ITQs do not simply involve a change in the

ownership of marine resources. They involve a radical political, social and cultural change, where the role, responsibilities, priorities and authority of the State are profoundly modified, removing public control, by allowing the forces of the market to ultimately decide who will be allowed to fish.

At the same time, ITQs provide enormous social, economic and environmental incentives to large fishmeal companies and to European and Asian transnationals, allowing them to continue consolidating their control over the Southern fisheries.

People's hopes now rest on the negotiations being carried out by the under-secretary, who is trying to insert some changes into the ITQ project. These will hopefully include the allocation of a 'collective quota' to the artisanal sector, and will not link the associated species to the principal quotas.

Dark future

Faced with this dark future, citizens organizations are demanding that democratic control be exercised over the national natural resources and marine ecosystem, through strengthening people's participation, not only in the access to these resources, but also in the decision making processes, so that it will be possible to build an alternative model for fishery development, based on environmental sustainability and social equity. 

This article is by Juan Carlos Cardenas and Patricio Igor Melillanca of Centro Ecoceanos, Chile. E-mail: ecoceano@entelchile.net

Pushed into a corner

Some of the crucial issues facing the artisanal fishing sector in Chile were discussed at the recent CONAPACH Congress

The 15th National Congress of Chilean Artisanal Fishermen, organized by CONAPACH, took place in Talcahuano, in the south of Chile, in November 1996. This Congress discussed developments over the previous two years since the launch of a national programme of action.

The Congress represents a unique and traditional meeting space for fisher organizations in Chile and allows policies to be decided for the following year. The meeting is an indication that the process of organization and social cohesion is still very important for the development, not just of those directly involved in the sector, but of the nation as a whole.

There are now 60,000 people involved in the artisanal fishing sector in Chile, with total catches rising to 811,000 tonnes in 1995. The state of the resource is still a concern and there are many challenges to be faced. CONAPACH exists to develop the artisanal sector in Chile and to strengthen the level of organization within this sector of the national fishing industry. The role of the State and organizations has been expressed in the evolution of a specific artisanal fishing policy which guides the development of the sector.

The opening address of the Congress pointed out one of the most salient issues in discussing artisanal fishing in the Latin American context: neoliberalism and its impact. It is felt, in Chile at least, that neoliberal (or monetarist) policies have forced artisanal fishing into a corner by requisitioning use rights that have traditionally resided with the artisanal community. ITQs (Individual Transferable Quotas) are seen as a product of these neoliberal economic policies. Artisanal fishing existed in Chile long before the Spanish arrived in the 16th Century, and

Don Hugo Arancibia Zamorano, and the then National President of CONAPACH, giving the opening address at the Congress, expressed a desire to see it continue to exist into the 21st Century.

In 1994, CONAPACH had launched an extensive national action programme which had four main pillars: (i) organization as a prerequisite for development; (ii) unity as a central element of any progress; (iii) the need for a development policy for the artisanal sector; and (iv) the need to decentralize CONAPACH. In an attempt to demonstrate that this action programme was being put into practice in a real and evident way, the 15th Congress was held in the south of Chile, rather than in the capital.

The basic document for the development policy for the artisanal sector was signed in the presence of the President of the Republic in August 1995. This was a historic moment, as it was the first time that representatives of the State and the artisanal sector got a recognized agreement and a set of guidelines for the process of development based on other political and technical points of view. The fundamental part of the development policy aimed at improving the conditions of the communities and the fishermen, through policies concerning the arrangement for artisanal fishing and the strengthening of fishing institutions.

Framework in place

Although the document had no immediate discernible effect, the framework is in place (such as the revised 1991 Fisheries Law) for progress to be made. One of the most crucial elements of the new relationship between the State and the artisanal sector is the establishment of the artisanal fishing zone that extends for five miles offshore.

However, because the State views economic interaction between the industrial and artisanal sectors in this area as the norm rather than the exception, CONAPACH is still striving to plug the 'holes' in the five-mile exclusion zone.

As a reflection of the decentralization of CONAPACH, it was stated that there needed to be consultations with the three macro-zones in the country (representing the north, the centre and the south—three very different geographic and climatic zones) to ensure that this was the stated objective of all the regional institutions.

The programme of action initiated in 1995 had also stated the need to increase artisanal fisheries' representation in the Fisheries Council which informs and comments upon government policy. Although a development fund was established under the 1991 Fisheries Law, because it is currently funded by fines and only an inadequate State contribution, it is unable to respond to the sector's needs. As a regulatory mechanism, the 1991 Fisheries Law has seen a decrease in the number of violations, but the number of cases reaching court is still too low, and there are insufficient facilities for inspection.

A relationship with the Ministry of Public Works was written into the development policy with regard to modernizing harbour infrastructure in bays and inlets. This involves a programme of investment and the development of inland transport. The hope is that this relationship will help prevent traditional artisanal harbours being developed for the benefit of tourism or industrial fishing. It is strongly felt by CONAPACH that bays and inlets used by artisanal fishermen are not just geographic features, but also form the roots of communities and represent complex economic, social, cultural and political spaces. In order to drive this idea to the forefront of government policy, CONAPACH has participated in the formation of the national coastal zone management policy.

Whether or not artisanal fishermen should become micro-enterprises is a key question in the sector at the moment and

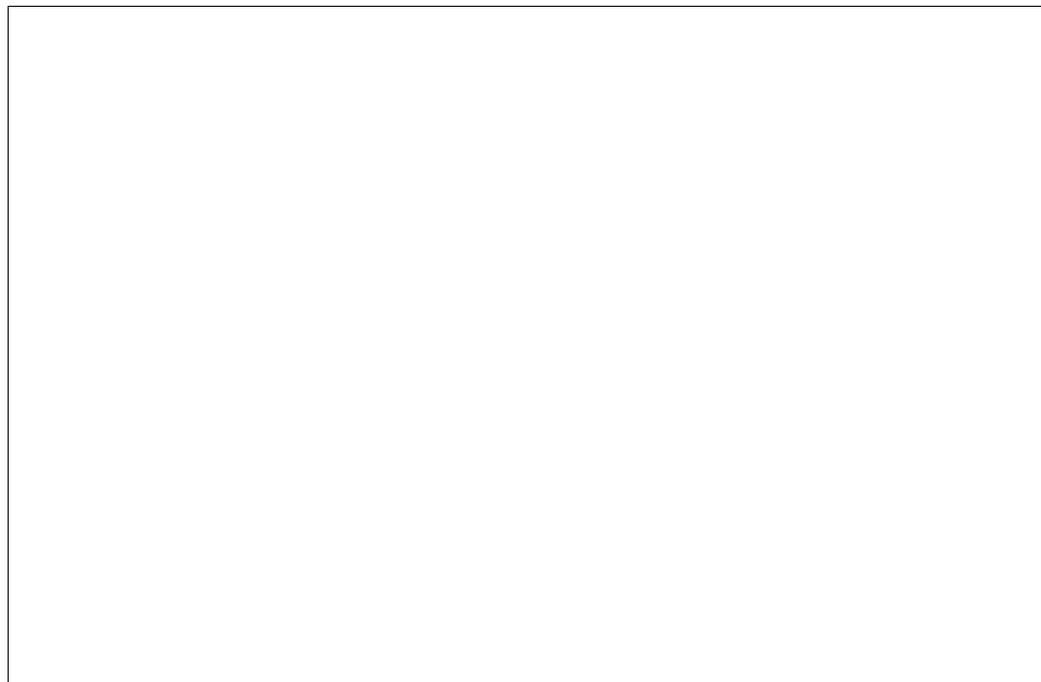
derives from the concerns about neoliberal economic policies. This issue has also arisen because of the difficulty that fishermen have in gaining access to finance from public and private banks. CONAPACH argues that artisanal fishermen can develop adequate marketing strategies by maintaining a solid union between the organizations, and that there is no need for them to abandon this traditional structure.

The 'development policy' element of the action programme focused on enabling local organizations to improve their level of participation. CONAPACH has encouraged the creation of Regional Committees for Fisheries Development, which are official counterparts to articulate specific policies to the State. There are currently seven such committees in Chile. There were several workshops held at the Congress dealing with various aspects of artisanal fishing. The recommendations and conclusions of these workshops (all of which follow from the above discussion) are detailed below.

With regard to the five-mile exclusion zone, CONAPACH declared that it will never allow industrial activity in this zone and demanded that the law be changed to remove the articles on industrial activity and bottom-trawling that allow these breaches to happen. The Environment and Research Working Group argued that CONAPACH should be able to rely upon a body of efficient and suitably qualified environmental scientists who can give necessary assessments to organizations faced with the problem of pollution. Regional workshops were proposed to improve the amount of environmental data available—both with regard to pollution and to the state of the fish stock. CONAPACH defends bays and inlets as a fundamental part of the fishermen's heritage and as the building blocks of artisanal fishing. With regard to the critical situation in some bays, non-transferable property rights should be granted on 99-year leases for the exclusive use of artisanal fishing organizations.

Aquaculture projects

Artisanal fishing organizations are now involved with aquaculture projects but need improved training in this field.



It was proposed that a network for exchange of information on prices and markets in Santiago, the capital of Chile, be set up along with a national model of co-ordinated sales of fish products from small and medium producer centres.

It was suggested that fishing be introduced into the education programme and that grants for children of artisanal fishing families be established to give them access to higher education. It was also felt that a maritime museum should be set up to record the history of artisanal fishing in Chile.

Due to their comparative isolation, rural fishing bays are at a disadvantage as far as development is concerned. They also fail to attract government money because of the lack of expertise to put forward projects. An improved base of technical advisers is needed to remedy this situation. The lack of co-ordination between the State and fishermen with regard to development projects is considered to be a major problem within the artisanal sector in Chile.

It is felt that there is no collective consciousness about artisanal fishing problems and that there is a lack of understanding of management problems by members of the organizations. Having agreed that there is a lack of attention paid to the role of women in the sector, a

women's department within CONAPACH was proposed.

CONAPACH urged the government to encourage increased national consumption of the artisanal catch which is, overall, very significant to the country's fish production.

Recommendations made

Various technical recommendations were made with regard to benthic, pelagic, demersal and aquaculture resources. Most of these recommendations urge the government to look into the issue of declining catch rates, and ways of preserving the resource. On aquaculture, the government was urged to change the rates charged for concessions: seaweed and salmon producers face the same charges despite the great disparity in profitability of the two types of production.

This summary of the report resulting from The 15th National Congress of CONAPACH (Congreso Nacional de Pescadores Artesanales de Chile) was written by Elizabeth Bennett, MSc Fisheries Management student at the University of Portsmouth, England.

Artisanal fisheries

More than just quotas

Zoning and modernization in the fisheries sector have not solved the problems of Chile's artisanal fishermen

For some years now, Chile has been following a path of modernization and opening up of its economy. Basic principles of free trade, privatization and the spirit of enterprise have been widely adopted and are now the common practice in all economic spheres. In the fisheries sector, each enterprise decides the kind of activity it engages in, according to profitability and the means available to it. This applies as much to industrial fishing fleets as to artisanal workers on their small fishing boats,

In this context, the conflict that erupted at the end of 1995 between hake (*Merluccius gayi*) fishermen in Region V, using different gears, came as no surprise. Artisanal fishermen, who, perhaps, for family reasons, inherit their boats, catch fish for the market. It is usual for a fisherman to operate the boat himself, and sometimes with the help of his relations. Perhaps after a good season, and with the help of their savings, artisanal fishermen are able to purchase larger boats for mid-water fishing.

If they want to continue as artisanal fishermen, according to the Fishery Law, their boats must be less than 18 m in length and no more than 50 gross registered tonnes (GRT). Such a boat can no longer be managed with only the help of relatives. The fishermen thus have to contract a crew. They also have to abandon their hook-and-tine and take up trawling instead. However, those other artisanal fishermen who continue to use longlines see these trawler-men as competitors.

There exists a conflict between artisanal fishermen over hake. It is a species which is fully exploited, and is regulated by an annual quota divided between the

industrial and artisanal sectors. In 1995, the former was allocated a quota of 64,000 tonnes, and the latter, 16,000 tonnes. According to statistics from the Fisheries Sub-secretariat, there are around 2,300 artisanal craft and about 20 trawlers. There are also an estimated 40 to 50 mid-water fishing boats.

Various aspects of the problem are leading to widespread violence. On 1 November 1995, the Fisheries Sub-secretariat issued Resolution No. 1557, prohibiting the use of trawls in the artisanal hake fishery, so as to control fishing effort. It provoked an immediate and violent response from the trawler fishermen. This prompted the Sub-secretariat to delay the introduction of the decree by 45 days, so as to allow time for these boats to change their target fisheries to, for example, *blanquillo*, *congro* or marlin.

In turn, the delay provoked a reaction from the Fishermen's Federation which protested against the period of grace granted to the trawlers. In the first few days of 1996, over 2,000 fishermen from Regions IV and V undertook violent protests in front of the parliament in Valparaiso.

They were led by Humberto Chamorro, president of the Artisanal Fishermen's Federation in Region V, and also treasurer of CONAPACH, an organization with members on both sides of the dispute. The artisanal fishermen demanded an immediate withdrawal of the extension. They argued that fishing with trawls caught 20 times more fish than longlines or nets, and would lead to unemployment, falling prices and resource depletion.

Intervention

Faced with such violent protests, the Finance Ministry intervened and called

for changes in the Fisheries Law, which would recognize the existence of an artisanal sub-sector that used industrial techniques such as trawling.

The Finance Minister, Alvaro Garcia, proposed that the law only needed to distinguish between industrial and artisanal fishing sectors, and that the only way to discriminate between trawling, net fishing, and longlining would be for fishermen to come to an agreement amongst themselves. They gave the members of CONAPACH a 10-day period to come up with a proposal on how the fishing quota for 1996 (16,000 tonnes) would be divided between trawlers and other artisanal craft.

However, CONAPACH was not able to come to a consensus. Chamorro described as unacceptable Minister Garcia's proposal to modify the Fisheries Law to create an 'intermediate' fishery sub-sector, comprising both trawlers and artisanal fishing boats. Chamorro argued that including trawlers in the artisanal sector "would be tantamount to legalizing overfishing and killing off the artisanal sector throughout the entire country."

For his part, the president of CONAPACH, Hugo Arancibia, argued that "the 200 trawler fishermen could fish outside the five-mile zone, but should be prohibited from fishing within it. Those trawlers over 50 tonnes, which were fishing with the consent of the authorities within the zone reserved for artisanal fishing, were having a much greater impact than all the small-scale fishermen put together, with only 21 boats."

As CONAPACH was not able to reach an agreement internally, the Ministry of Finance decided to put into force Resolution 1557, which completely banned the use of trawls in the artisanal hake fishery, both within and outside the five-mile limit.

The next step would be to change the Fisheries Law, in consultation with the National Fisheries Council, so that the fisheries authorities could allocate fishing quotas by fishing technique. Through this proposal of the Fisheries Sub-secretariat, the modification of the current law could take account of, and balance out, the

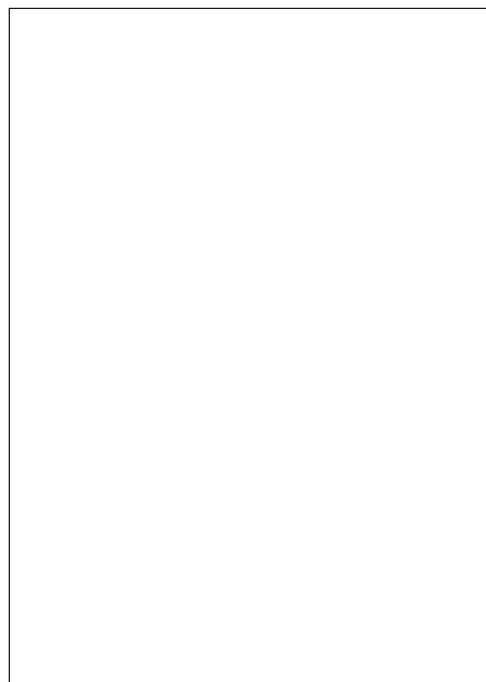
various impacts of the different fishing techniques on the fishery resource.

Thus, for example, it would be possible to impose greater restrictions on fishing gears and techniques being used on particular stocks that required greater protection. Furthermore, there were indications that, from a socioeconomic perspective, the new powers granted though this initiative could reduce the competition in certain fisheries where different kinds of gears were used and where each gear tried to catch the quota allotted as soon as possible.

It was not long before various sectors within the fishery began to oppose the proposed changes in the fisheries law. The National Fishing Society (SOAPESCA) expressed concern over the way that social pressures could bring about changes in the Fisheries Law. The Society argued that, as it is, the law provides a just legal framework, which could be wrecked by these changes. The law could easily be changed through different kinds of pressures, such as hunger strikes, street violence or protests, which, once made, would only encourage further pressure, eventually causing the downfall of the fisheries administration in Chile.

Change in law

In another statement, the Society argued that the law would not only have to be changed for the illegal boats to operate,



but, at the same time, other changes would be needed for a formal authorization. For instance, trawlers would have to be listed on the artisanal registry.

This would then lead to a condition of overfishing, according to the criteria defined by the Fisheries Sub-secretariat. These and other actions would undermine the key principle of restricted access, one of the pillars of the Fisheries Law.

Jan Stengel, the chairman of the Society, also said that the crisis in the hake fishery could provide an opportunity to the government to devise a policy to promote resource recovery. "To change the existing laws is a mistake, and sends out the wrong message", says Stengel.

According to him, the problem was confined to a small group of fishermen who "were hardly artisanal fishermen, as some owned investments worth more than a million dollars." Cristian Jara, the general manager of the Society, had more to add. He said that "the technical debate had been sidetracked, without considering the consequences for the 70,000 workers who depend on resources to which, until now, the industrial sector did not have access to".

As was expected, at the end of January 1996, the Independent Union of Artisanal

Fishermen (comprising mid-water fishermen from San Antonio), led by Cosine Caracciolo, contested the trawl ban. They organized protests in Santiago and, mainly in Valparaiso, violent street demonstrations, civil disturbances and hunger strikes. Caracciolo maintained that the trawlers wanted to be allocated a fishing quota outside the five-mile limit, because this belonged to artisanal hook-and-line fishermen, but wanted the larger boats to be allocated some of the hake quota.

The Fisheries Sub-secretariat then proposed some alternative ways of solving the trawl problem. First, they announced that they would analyze the possibilities for the trawlers to catch alternative resources. Next, they would re-establish the exclusive five-mile artisanal fishing zone, where industrial fishermen could operate only until 6 March 1996. The proposal implied that once the new law had been passed, the trawlers would have no rights to fish, would not be allocated quotas, and thus they would have to go back to using longlines.

Signs of agreement

However, just before the end of February 1996, the fisheries authorities and the conflicting factions of the artisanal fishermen began to show the first signs of coming to an agreement. The solution proposed by the Finance

Ministry—subject to the approval of the Regional and National Fisheries Councils—was to increase the artisanal hake quota from 16,000 tonnes to 20,000 tonnes, and to redistribute it. The traditional craft would be allocated 75 per cent of the quota, while the trawlers would have to fish outside the five-mile limit. There was also an additional proposal to modify the Fisheries Law to establish distinctions within the artisanal sector.

The participants at this discussion included Patricio Bernal, the Finance Minister in the Fisheries Sub-secretariat; Juan Rusque, the Director of SERNAP; Carlos Carrasco, the representative of the Independent Artisanal Fishermen's Union; and Hugo Arancibia, the Chairman of CONAPACH. The agreement has yet to be ratified by the trawler fishermen, and to be approved by the national and regional Fisheries Councils.

But not everyone was pleased with the accord. Humberto Chamorro claimed that, within three years, the hake stocks would be exhausted, due to the extra 4,000 tonnes to be fished. He added that the "solution proposed by the authorities was based on the invention of fish politics", which did not exist in reality and which ran against the Constitution, which required the conservation of marine resources. Chamorro also said that his organization would never accept industrial fishing in the coastal area.

After analyzing the impact of the increased hake quotas during the first few days of March, the Regional Fisheries Council for Regions V and IX rejected the proposals "which had no technical basis to support any such increase."

After an extensive debate, the National Fisheries Council, headed by the Fisheries Subsecretariat and including the Director of DIRECTMAR, the Directors of IFOP and SERNAP, four representatives from the industrial sector, four fishworker representatives, and six members designated by the Executive, proposed the creation of a special commission.

This comprised Patricio Bernal, Juan Rusque, Pablo Alvarez, Eduardo Vio, Juan

Claro, Jose Luis del Rio, Daniel Malfanti, Ismael Fritz, Luis Almonacid, Guillermo Risco, Manuel Largo and Humberto Chamorro. Its mandate was to analyze the increased allocation in hake quotas. The Finance Ministry stated that the only solution to the problem would be by changing the Fisheries Law to differentiate among the fishermen according to the gears used. This would mean creating a new category of fishermen. Each boatowner and anyone with the right to fish would be given their own quota of fish.

SOAPESCA, for its part, argued that the resolution of the conflict could not be achieved by weakening the industrial sector, which accounted for 96 per cent of fish exports. The Society also commented that every law could be modified—all it required was sufficient time and justification to do so.

By the beginning of March, the National Fisheries Council had decided to approve the increase in hake quotas by 4,000 tonnes. According to the Council, it concerns "a special quota, which can be considered as a future entitlement. This means that the artisanal fishers (traditional craft and trawlers) can not make a further claim in 1997 for additional quotas."

The Council also pointed to the lack of legal frameworks for dealing with situations that had arisen since the Fisheries Law had been enacted. Moreover, they recommended a total ban on trawling for hake within the five-mile zone reserved for artisanal fishing. Finally, the Council proposed a ban on the use of trawls on artisanal fishing craft from 31 December 1996.

Patricio Bernal stated that these agreements did not imply a derogation on the artisanal trawl ban for hake, which would be enforced both within and outside the five-mile limit. However, the Fisheries Sub-secretariat is now looking at the possibilities for introducing the system of Individual Transferable Quotas to this fishery.

Worry over decree

In parallel with the recommendations of the National Fisheries Council, SOAPESCA

expressed the worry that the decree extending the rights for industrial fishing for another two years within the zone reserved for artisanal fishing, between Regions V and IX, had not been published in the official gazette.

However, the authorization had been extended for all the other regions of the country. In the same way, ASIPES (the Industrial Fishermen's Association of Region VIII) demanded the fisheries authorities to let them fish within the five-mile zone (between Region V and IX) in seasons when there was little or no artisanal fishing.

In summary, the basic problem with artisanal trawling would seem to be linked to the need to establish an appropriate definition for 'artisanal fishing'. Is it sufficient to limit boats to less than 18 m in length and 50 GRT? Furthermore, how will it be possible to effectively control the quotas allocated to artisanal fishermen operating within the five-mile zone? At this stage, however, there does not seem to be any reasonable solution in sight.

This article, from the journal Chile Pesquero, has been translated by Brian O'Riordan of Intermediate Technology, UK

The future of fishworkers

WE ARE THE BEACONS OF THE SEA

He is himself a fisherman and president of the single largest organization of fishworkers of Chile (1). A union federation, born in 1986, uniting at present some 100 local associations all over the country. Humberto Chamorro-Alvarez recounts in this article the many problems challenging the profession and suggests means of facing them. (2)

We must clearly state that our profession is facing enormous challenges which, in course of time, could lead to its disappearance. Our responsibility is to make people aware of the values we represent and the dangers that await us for the future, and thus to be able to seek global solutions to guarantee a reasonable future for millions of fishermen, who on every continent, work daily on the oceans, lakes, rivers and lagoons of our planet.

In defence of democracy

The future of small-scale fishermen the world over every morning I take to the sea in a small 6-metre boat equipped with an outboard motor and two long-lines prepared for catching hake and other demersal fish. But at the same time, for the past ten years, I have also been the executive of a union organisation that counts 250 members, all fishermen. Thanks to our struggle, we have achieved the establishment of a basic infrastructure. We have our Welfare and Health Service. We enlist our doctors and pay subsidies to our ill members. We bury our dead in our own cemetery. For all this, we have had to acquire great discipline, distribute jobs among committees with various tasks and share out our endeavour. Our fishing is undertaken by 80 boats, our production provides work for approximately 1000 people and food for the city of Valparaiso.

In 1985, following an invitation from a University, we launched the idea to create a national organisation of Chilean fishermen. A special commission was thus established and a national Congress held in November 1986, 74 grass-root organisations par-

ticipated in this Congress. With the aim of forming an organisation that could represent our profession, we created CONAPACH. Thus began a long struggle for bringing together all regional organisations. A second Congress took place in 1988 and we have presently 8 regional organizations with over 100 grass root associations from all over the country. CONAPACH is actively engaged in the struggle to defend the democratic rights of the Chilean fishermen. CONAPACH opposed strongly a law project in fisheries which would cause great harm to the fishermen and the country.

This experience shows us, small-scale fishermen, the importance of creating jobs, supplying good quality food, and contributing to the regional and national economies. As fishermen we are also beacons of the sea because we detect the dangers that threaten our various resources. We know that pollution from cities, industries, mines and farming is very high in a number of countries, and that it affects life and the marine species that are the resources of our activity.

Autonomy or submission

We are suffering from a mass dispersion because in general we live far from urban centres, near the coasts or on the banks of rivers or lakes; sometimes we live far from our villages. We are surrounded by nature and we rejoice in this advantage, but at the same time we suffer from a lack of services to satisfy our needs. This dispersion is even more serious when it affects the formation of representative organisations which fight for the defence of rights and seek solutions to the problems and needs of our families and of rights

(1) CONAPACH - National Council of the Artisanal Fishermen of Chile

(2) This article represents the main points of the intervention of Hector Chamorro-Alvarez during the International Conference held at Bangkok (Thailand, January 1990). The complete intervention has been published in SAMUDRA Dossier n° 3.

and seek solutions to the problems and needs of our families and of our profession

As fishermen, we are often marginalized and we do not usually benefit from the advantages of education, housing, health, communication and culture. These advantages of modern society do not come easily to us. The problem does not lie in the lack of these services because solutions can always be found, but our marginalization is more profound since we are not considered when it is a question of participating in taking the decisions which affect our activities.

As fishermen, we are enormously dependent on creditors, merchants, local politicians and leaders of social, and sometimes religious, organizations. In a number of cases we have mortgaged not only our assets, but also our dignity and future.

We find ourselves facing a large number of contradictions and that we must clarify in order to know at last who our friends are and who our enemies. On one side we are facing the contradiction that exists between the city and the country, and because of this, the contradiction between traditional and contemporary values. We are often people of the land. We live in the country and think and act like country people. But at the same time, we incorporate contemporary values and technology and our products enter into the network of world trade. For that very reason, we are in most cases the victims of a number of consequences to which the countries of the North subordinate the countries of the South. In developing countries, we are often exploited due to poor relations in the context of international trade imposed by the developed countries. It is hard to know when the developed nations are our friends and when they are our enemies.

It is essential to move ahead, without losing hope, in order to seek a solution to our problems and to build our future. We already know the challenges: autonomy or submission. And the most characteristic element in the life of a fisherman is precisely his freedom, his independence to tackle the problems and the profession as a whole.

Organisation must lead towards development

Without a solid organisation, from the foundations up to regional and national structures, nothing good can be accomplished for our future as fishermen and the future of our families. But the organisation must be born of ourselves. It must be ours without outside dependence or intervention; we must take our decisions freely and completely autonomously. Only fishermen can take part in our organizations.

An autonomous organisation is the sole and major condition for building our future and for being able to confront our enemies. Based on the organisation, we will know who are our friends and who are our enemies, who is with us and who is against us. Our organisations must be profoundly democratic and the respect between us very deep. But our participation must also be highly responsible. We must accomplish our undertakings. We cannot corrupt our organisations by our own corruption or our own faults. Our organizations must distribute power and have the participation of all members on committees of various types.

The internal and autonomous organisation must be directed towards development. Donations and aid from governmental or non-governmental organisations—all the money in the world—cannot buy an organisation. Nevertheless, our organisation can lead us into spiralling development. From the moment we have a solid organisation, we can open the way towards cultural development, then towards social development. We will learn new technology and achieve economic growth. But first, we must have an autonomous organisation our own. Thanks to it, we will be able to advance and obtain social, technical, economic and cultural advantages. With all this, we will achieve our development. Many believe that outside plans and aid programmes can bring development. Yet we have seen how millions of dollars coming from banks or outside agencies are lost en route wherever there has been no truly autonomous organisation.



We must take care of our resources

The future of the organisation and internal development is also dictated by the survival of marine and aquatic resources in general. Yet these resources are in danger. Many nations have built fishing fleets or concluded accords for extracting existing resources in vast quantities along the coasts of West Africa, the South Pacific and Asia, or in coastal lagoons. On the other hand, the pollution which we have already cited affects the survival of fish, mollusks and crustaceans. For their part, nuclear experiments in the Pacific are placing in danger the quality of the water and concentrating radioactive elements in marine species. In the sea, everything communicates, and therefore, everything is in danger.

Over the coming years, we expect important changes due to the warming of the earth through the greenhouse effect caused by gas emissions and the hole in the ozone layer. These changes will affect marine life and we must not hesitate to warn about the sort of problems which are already being produced through temperature changes and rain.

Attention to the resources also means that we are seriously beginning to be "cultivators" or fish farmers within the realm of our possibilities. This is being realized primarily when resources are depleted. We must watch over our resources and be in close contact with the scientists who can cooperate and exchange

their experience and knowledge with us in order to start fish breeding and the cultivation of algae and shellfish.

Our participation must be real and not necessarily favourable to the established structures of power. If we can count on an autonomous organisation and internal and sustained development, especially in the economic sector, the authorities have to listen to us and give us the capacity to express our concern and our demands. Such was the experience of fishermen in some developed countries like France, Japan, Norway and Canada where fishermen's organisations are both respected and respectable. They are given the change to discuss laws, and the laws protect their rights in the fact of industrialists, businessmen, and other authorities of the country.

Fishermen walk on a road strewn with hope and, as executives, we cannot disappoint the expectations of millions of fellow fishermen who are spread over five continents. The future will be ours if we build it ourselves with the joint aid of those researchers and technicians who are with us.

The day will soon come when a single voice will express the outcry of all the members of our profession within one international, autonomous organisation of fishermen and fishworkers.

Humberto CHAMORRO-ALVAREZ