

## Maritimes fisheries

**Let's fix it**

**The SW Nova Fixed Gear Association has proposed an action plan to deal with the problems being faced by Canada's Maritimes fisheries**

Canada, with the longest coastline in the world, and the second largest continental shelf, controls an offshore area of more than 65 million sq km. Not surprisingly, fishing has been an important economic activity of Canada's coastal population.

However, with the over-harvesting of fish resources and the acute degradation of the aquatic environment, Canada has seen the collapse and closure of some of its important fisheries. Perhaps the most drastic has been the collapse of Atlantic groundfish stocks.

The impact on fishers has been equally drastic. It is estimated that over 40,000 fishers and fish plant workers have been rendered jobless as a consequence. The industry is being propped up by government subsidies.

Viewpoints that have attributed the decline of fish resources to natural causes and to factors beyond human control, have been contested. It is alleged that such views attempt to make or gloss over the damage caused by groundfish dragging in the 1960s and 1970s, by foreign and domestic freezer draggers.

There is a pressing need to restructure the fishing industry, drawing from the lesson of history. An alternative management system, based on the principles of co-management needs to be instituted. The approach should focus on how, when and where to fish, rather than on how much fish should be caught. The restructuring should also be based on economic principles which ensure that the industry remains both competitive and remunerative.

A revamped management system should be designed to achieve the following:

- sustainability of the fish and their ecosystems;
- efficiency in maximising the economic exploitation of the resource;
- stability for coastal communities; and
- self-reliance, not reliance on public money.

The need for co-management, to recognize and respect the deep knowledge fishers possess about the marine ecosystem, has been emphasized. However, co-management is possible and workable only between partners who are equally strong and committed.

The current reality in which in all decision-making power rests with the Minister of Fisheries and his department, has to be changed, and more equitable power sharing arrangements have to be worked out. More powers need to be vested in fishers and their representatives.

This raises another related issue—the need for strong representative organizations of independent fishers. At present, these enjoy limited membership and suffer from a chronic paucity of funds. The enactment of supportive legislation, which makes it necessary for fishworkers to join professional organizations representing their interests, may be required.

**Equal partners**

Also, if fishers are to perceive themselves as equal partners in the co-management process, they need to develop a more positive attitude about themselves and their profession. This calls for the proper education and training of fishers in the

context of maritime realities and an acceptance of minimum standards for those who are going to fish. There needs to be a focus on strategies and technologies for fishing that minimize both the potential for abuse and the cost of enforcement. The qualifications and skills of registered fishers need to be upgraded.

**C**o-management can be potentially advantageous. The direct involvement of fishers will force them to be fully informed about the issues at hand and will contribute to responsible and knowledgeable decision-making.

At the same time, a greater sense of ownership of the resource will be fostered; leading to fewer violations and malpractices. Under co-management, enforcement can be more effective and more attuned to the different nature of violations in various areas. Scientists will be able to work in partnership with fishers and to pool together their expertise.

The numerical approach to fisheries management, which stipulates the quantity of fish that can be caught, has been accused of being short-sighted and inadequate.

This is partly due to the difficulty in predicting catch since marine ecosystems are complex. There are thus fundamental and inherent problems with the current

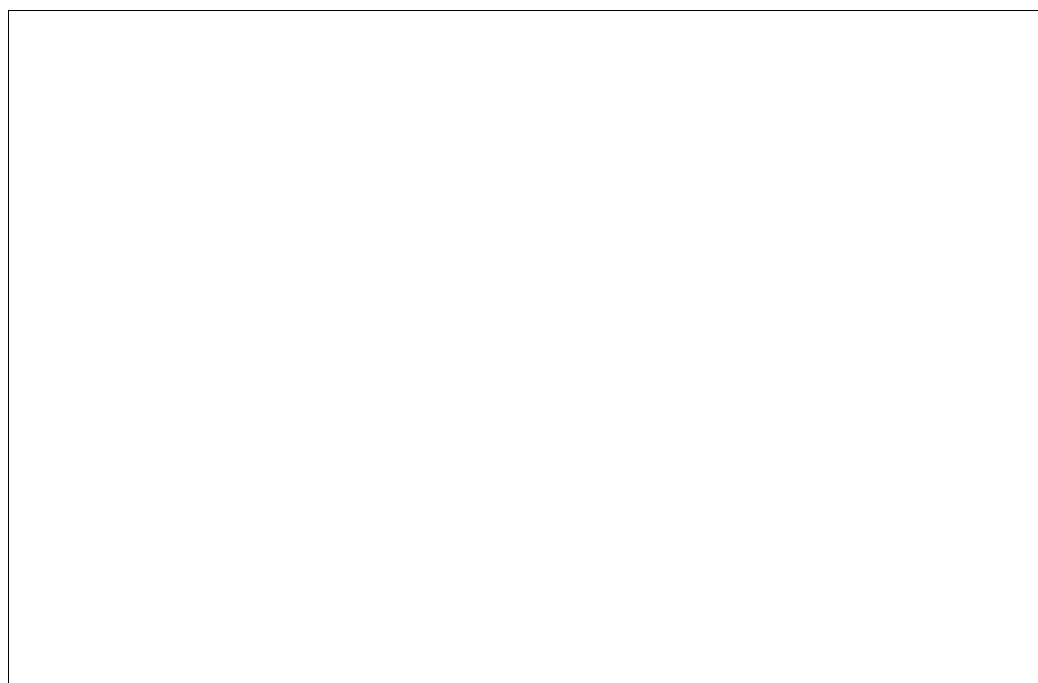
management system, centered around quotas for the amount of fish landed.

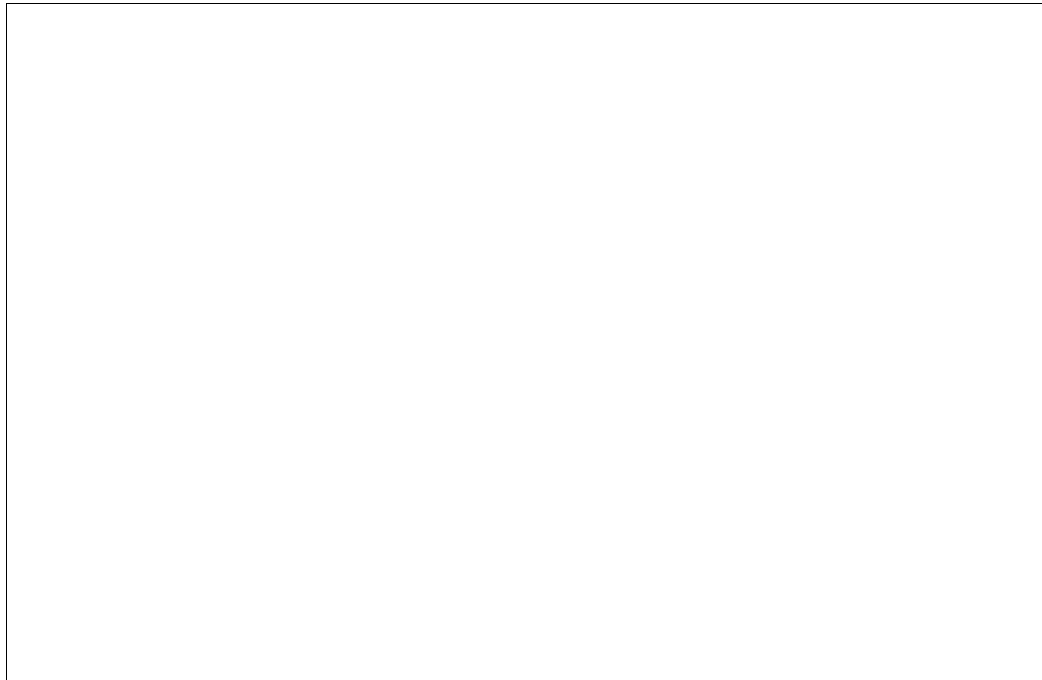
This system also fails to control the amount of fish caught. Violations such as discarding and high grading are commonly observed. It is evident that there are problems both with the approach and its enforcement. There is little attempt to explore the connection between the fishing technology adopted and the decline of fisheries, as for instance, between the use of draggers [trawlers] and the decimation of fish stocks.

Longlining is seen as a superior option to dragging for catching groundfish in a sustainable manner. It is considered a more efficient and less wasteful method. Draggers, for instance, have been accused of damaging fish and squashing them. There is evidence to indicate that dragging damages ocean beds, disturbs spawning fish and reproductive activity, and results in catches of 'sick' fish, that is, fish, which have spawned only once and which are underweight.

#### **Restricted catches**

The use of hooks, on the other hand, ensures that fewer fish of better quality are caught so that the volume of catches is restricted. At the same time, regulations related to hook size are more easily enforceable. Equally important, longlining provides employment to a greater number of people.





**I**t is, therefore desirable, and even imperative, that dragging be given up in favour of longlining. This will also deal with the problem of overcapacity, and, at the same time, will provide work for boatyards.

The tenets of conservation fishery require that

- spawning and nursery areas be protected;
- only sexually mature fish that have spawned only once be caught;
- the brood-stock contains a significant number of large spawners; and
- different species be targeted at different times of the year for optimal return.

It is evident that to put the above principles into practice, an in-depth knowledge of the marine environment is called for, as is a fine-tuning of fishing plans to cope with the unpredictable natural world. That this is possible only under localised co-management is evident. A greater co-operation between scientists and fishers, and a greater use of fishers' anecdotal knowledge, is required. The closure of additional spawning and nursery areas for longer periods of time,

the delineation of gear-specific territories and the establishment of several Marine Protection Areas (MPAs) are also required.

A management system based on traditional knowledge needs to be devised to ensure that fishing effort maximizes return from catch. Local co-management will be able to direct fisheries to the best advantage of the stocks, the fishers and their communities, based on fisheries management principles like optimal yield, the encouragement of spawning and the protection of juvenile fish.

The economical goal of a revamped fishery management system should focus on the creation self sustaining, family-supporting jobs. A property regulated private enterprise system, which is productive, profitable and efficient, needs to be devised.

#### **Vertical integration**

This will require the delinking of the fish processing from the resource. In other words, the vertical integration evident in the present-day fishing industry needs to be modified. A freely competitive fish processing sector is called for, to encourage the development of smaller, more efficient enterprises, which do not require government subsidies and bail-out to survive.

Ensuring that fish processors are debarred from actual ownership of shipping vessels

will be advantageous in several respects. Processors will be unable to influence or depress market price of fish, ensuring a fair return to actual fishers.

**A**lso, they will be unable to dictate to independent operators of fishing vessels, 'shopping lists' of fish they require to meet the demands of the market. This will eliminate the wastage that results from discarding undesirable species and from high-grading.

A freely competitive fishery sector is also required. This calls for a pro-owner/operator policy. Owner-operator tends to protect the resource better, due to their greater personal and financial stake in the industry.

Also, the process of privatizing hitherto common marine resources, through the system of granting a limited number of licenses, needs to be checked. These property rights were introduced to reduce excess capacity and thereby overfishing.

But they have only succeeded in paving the way for the formation of monopolies. They have facilitated a concentration in fishery without protection of the resource. Independent owner-operators should be allowed to compete in an environment which regulates how, when and where to fish.

A uniform quality grading system for fish products is also required. This would not only increase consumer acceptance and confidence, but would also reward fishers for adopting quality-enhancing practices.

Incorporation of these suggestions into a new management system would go a long way in restoring the health of the fishing industry. The Canadian taxpayer will no longer be required to subsidize a mismanaged industrial system. ♣

This article, written by Chandrika Sharma of ICSF's Madras office, is based on a document of the same title, prepared by the sw Nova Fixed Gear Association