Integrating Safety at Sea with Fisheries Management



Driven by need and emboldened by technology, small-scale fishers are risking their lives by going farther out to sea. Fisheries management – through a sound MCS (monitoring, control and surveillance) policy – is essential to strengthen fisher safety. MCS will control fishing effort, upgrade skills and knowledge, strengthen data, facilitate search and rescue, improve discipline.

ate in October 2007, Perumal¹, 46, and his fishing mate Selvaraj, 42 (Cuddalore district, Tamil Nadu) went fishing one morning. They were on their new beauty, a 27 ft FRP boat driven by a 10 hp engine. Discarded on the beach lay their older vessel, a fivelog catamaran.

Ignoring a weather warning, Perumal and Selvaraj sought the rich haul of deeper waters. So did fellow-fishers. Some 40 nautical miles from the coast, they were buffeted by stormy winds. The boat capsized. Perumal and Selvaraj clung for dear life to two plastic cans meant for water and spare diesel. They were rescued 20 hours later by a passing ship: battered, sick, shaken, sans boat.

Around the same time: In neighbouring Sri Lanka, Vincent, 36, and a crew of four set sail from Negombo fishing harbor on "Shining Star" (a 15 meter FRP fishing vessel) on a three-week tuna-hunting voyage. They too made light of weather warnings. They made for the high seas between Nicobar and Sumatra islands, fairly well-equipped – VHF and SSB radio sets, some simple life-saving gadgets, food.

Names of persons and places changed to protect identity.

But nature played spoiler: depression, storm, equipment breakdown. Result: A little vessel let loose in the vast ocean expanse for almost a month. Happy ending, however. Rescue by the Indian Coast Guard.

Perumal and Selvaraj spent a week in hospital, Vincent and crew spent a month. But they were lucky to survive. Not so, many other fishers from India and Sri Lanka.

Such incidents in the waters of the Bay of Bengal raise several questions.

Are vessels like Perumal's and Vincent's meant (either built or certified) for deeper waters? Are they equipped with communication and life saving equipment? Is the crew trained in navigation, emergency repair and life saving? Do fisheries management policies incorporate safety concerns?

Let's look at some of these issues.

In many developing countries, fisheries is a major economic activity. It means food, livelihood, nutritional security, foreign exchange through export, it's a growth trigger in coastal areas. No wonder governments adopt growth-oriented policies. But the safety of fishers doesn't figure in their calculations. Many policies have actually aggravated the risk profile of fishers.

Growth oriented policy-making was fine when resources were aplenty and fishing effort was limited. Not the case today – the story is one of dwindling stocks and everexpanding capacity. Further, technology has enabled even smallscale fishers to move off-shore or fish longer. And many imperatives of sound fishing have been neglected - sound boatbuilding practices, use of communication and personal protection equipment, training in navigation, engine maintenance and repair. Result: Marine fisheries development has got lopsided. Risks have gone up manifold. For Perumal and Vincent,

Fishing management regimes and their impact on fishing safety

In 2008, the FAO and the NIOSH were partners in an international effort to document the relationship between fisheries management and fishing safety and also provide practical guidelines for fisheries managers and safety professionals on how they could help to make commercial fishing safer.

The study provided an expanded perspective of fisheries management (see the schematic diagram below). It showed that fisheries management policies affect fishermen's options, preferences and choices, and may also affect the human, equipment, and environmental factors that impact on safety. The primary goals of fisheries management may be resource conservation, economic growth and social amelioration; but fisheries managers should be aware of the indirect effect of management on safety.

The study observed that fisheries management is a complex challenge. Managers must attempt to balance multiple objectives with limited resources. The study recommended that fisheries managers:

- should be aware that the way fisheries are managed affects safety;
- should consider safety an explicit goal of fisheries management;
- should build up mechanisms for close collaboration and cooperation with the authorities responsible for safety; and
- should engage safety professionals to ensure competent safety records.



Fisheries Management: An Expanded Perspective

a day lived is a day of risks survived.

The solution? Devise fisheries management policies that strengthen safety. In a word: MCS or monitoring, control and surveillance. The Chittagong Resolution of 2008 passed by the BOBP-IGO's Regional Consultation on MCS urged member-countries to integrate MCS into fisheries policy and regulation, and make it a part of the management framework. It also urged education, training and awareness programmes as a part of the process (*Bay of Bengal News*, Vol IV, Nos. 15-16, March –June 2008).

An FAO 2001 study revealed that MCS capability in the region ranged from 41 percent (Bangladesh) to 62 percent (Maldives). The study also concluded that different management paradigms impacted differently on fisher safety. All the four member-countries of the BOBP-IGO have fairly large fishing fleets (ranging from 4 356 fishing vessels in the Maldives to some 2 40 000 in India) and large small-scale fisher populations. Management isn't simple. An openaccess fisheries regime makes it tough and complex.

How can safety at sea be integrated with fisheries management?

Safety concerns over fishing at sea have emerged in an organized way only recently, thanks to the United Nations. Pioneering work on smallscale fishing vessels (FAO and IMO); worldwide acceptance of labour rights (ILO); the initiatives of regional fisheries bodies such as the BOBP-IGO (and its forerunner the BOBP). All these have raised the profile of safety issues, led to the formulation of standards and guidelines, and spurred debate on action to reduce fishery-related accidents.

Developed countries such as the United States have set up systems for time-series data on the causes of fishing-related accidents (in Alaska in particular). Fishing has consequently become a much safer occupation in the U.S. Data in these countries shows a fall in injuries and fatalities, but there's scope for further improvement. In developing countries, however, reporting on accidents at sea is poor, so also understanding on the subject. A mechanism for monitoring and recording fishing-related accidents is essential.

A sound MCS would:

- enable regulation of access to the fishery resource through proper licensing and registration of fishing vessels;
- control fishing effort, if required;
- provide zoning for different categories of fishing vessels depending on their size, capacity and endurance to fish in different depths;













- make possible closed fishing areas and closed fishing seasons;
- ensure maintenance of log books and movement registers;
- coordinate and streamline search and rescue operations in times of distress; and
- in essence, bring much-needed discipline into fisheries.

Safety-at-sea is a multidimensional issue. It should therefore be regarded as integral to fisheries management. It shouldn't be bundled together with welfare programmes for fishers, in the form of compensation after accidents.

Some other points:

- Adopt a precautionary approach to safety, by ascertaining the causes for accidents, then deciding on interventions;
- Raise awareness, bridge gaps in knowledge and skills, involve fisher families in creating a 'safety culture' in the day-to-day life of fishers;
- Promote asset- building among small-scale fishers;
- Promote and strengthen insurance practices in fisheries (both life insurance and asset insurance – assets such as craft or gear); and
- Discourage risk-taking behaviour by fishers.

Fishers seem to revel in risk and adventure – an attitude that imperils personal safety. Perumal and Vincent are examples. Integrating safety with fisheries management is a challenge complex but not insurmountable. What should policy-makers strive for? Higher fish production alone? Or a sound, sustainable and stable sector, with reasonably safe and secure fisherfolk?

– Y S Yadava

Paintings by school children in India, Maldives and Sri Lanka depicting posttsunami reconstruction.