

Safety at Sea in Bangladesh

Basic equipment and hands-on practices demonstrated to small-scale fishers

Artisanal and small-scale fisheries dominate the marine fisheries of Bangladesh. A severe handicap of artisanal fisheries is the absence of navigational, aid or communication gadgets – and even knowledge or awareness of these gadgets. In fact, fishers set out without even life jackets and life buoys, the most basic of personal protection equipment (PPE). Hence, when calamities strike – be they storms, pirates or boat malfunctions – casualties are high. In the absence of any social security net, formal or informal, a fisher's death means a destitute family. Good news: This situation is about to change.

Under the Global Project on Safety at Sea (South Asia), hands-on training sessions were organised in Cox's Bazaar (17-22 October 2008) to familiarize fishers with handheld GPS (global positioning system) and marine VHF Radio and promote the use of PPE as well as of emergency medicines and safe drinking water.

Demonstration of improvised PPE

Earlier that day, a large group of skippers and crew assembled in the Fishing Harbour operated by the Bangladesh Fisheries Development Corporation (BFDC) in Cox's Bazaar to witness a demonstration of GPS and PPEs by the Coast Guard officers. They were shown how to wear a life jacket and how to stow it, and how to use a handheld GPS system. The fishers learned how to start a GPS, keep track of the cruising route, change pages and note positions during distress.

For many fishers, the PPE demonstration was an eye-opener.



Such is their belief in their own swimming ability that they don't regard PPE as essential. But they learned from the Coast Guard trainers that PPEs would keep them afloat and alive at sea even if they fell unconscious. So many fishers drowned every year despite being good swimmers – because they fell unconscious. Further, could they swim much when the weather got rough?

Float rings vs life jackets: The demonstration included a 'contest' between locally improvised float-rings and a life jacket. The float rings were made by binding together 12-14 floats used to mark nets. They are tied to the waist. The 'contest' took place at the river mouth near the BFDC Harbour. The result was inconclusive. Both float rings and a life jacket can keep you afloat, but a life jacket is easier to wear and more comfortable to use. On the other hand, the float ring is far cheaper, and easier to store and maintain as well.

The story of Jaladas and Kalidas

This happened in the third week of July in 2007, at the start of the hilsa season. Sanatan Jaladas was on the crew of a 65 HP hilsa fishing vessel.

He and 24 others were on their way to the Sundarbans. Disaster struck: bad weather, strong winds, vessel capsized! Sanatan was lucky, he caught hold of some marker floats, so did a few others. But he could not see Kalidas, his friend and neighbour. He was frantic, but all he could do was keep afloat himself by tightening his grip. Two hours later, Sanatan was rescued by another fishing vessel. But he lost five of his colleagues to the storm – including Kalidas.

Safety-cum-health awareness workshop

To promote basic safety-and-health practices among the fishers, a workshop was organised at Dakshin Dhurang Jelepara, a fisher settlement in Kutubdia upzilla, Cox's Bazaar, on the morning of 19 October 2008. Ferry services every hour link Dakshin Dhurang Jelepara to the mainland.

This was the first time an expert team was visiting the settlement, so a large group of men and women turned out. COAST, an NGO, facilitated the workshop, which was held in a local primary school.

The team consisted of Dr Y S Yadava (BOBP-IGO), Mr R Ravikumar (FAO), Dr Shariffuddin and Mr Zahirul Haque (Department of Fisheries),

Mr S Jayaraj and Mr Rajdeep Mukherjee (BOBP-IGO). Dr Misbah Uddin Ahmed, Resident Medical Officer, Government Hospital, Cox's Bazaar, accompanied the team.

During the three-hour session, fishers told the team about their problems out at sea. Most of them

Training in marine VHF radio and GPS

The use of Marine VHF Radio is unheard of in artisanal fisheries in Bangladesh – though international safety conventions declare that the use of VHF is a must (It often serves as the last resort of survival for a fishing vessel in distress). Of the country's 44 000 marine fishing vessels, only some 100 industrial trawlers have this facility.

On the afternoon of October 22, 2008, a group of 15 majhis (skippers) of artisanal fishing vessels were taken onboard the FV Moeen – a shrimp trawler operating in the Bangladesh EEZ. Their trainers: two officers from the Bangladesh Coast Guard. The majhis had 15 years of experience in fishing, but this was the first time they saw a VHF radio. They spent the first half hour of the training session seeing and feeling the device mounted on the cabin wall.

The majhis were all ears when the trainers explained the VHF device. They were told that it is a marine transmitter-cum- receiver. It operates only on standard international frequencies known as channels. Channel 16 is the international distress channel. Example: If fire breaks out in a vessel, the crew can transmit a 'fire' message through the channel and indicate their location.

As per international norms, ships and fishing vessels always keep their VHF active. When they pick up a distress call in their vicinity, they will rush to help. So will patrol boats of the Bangladesh Coast Guard.

Asked how a ship could locate the vessel in distress, the trainers pointed out that VHF radio is used in conjunction with the GPS system. Even a handheld GPS system can help to locate a vessel at sea. Asked

one majhi: did he have to speak in *ingraji* (English) on VHF radio? Not necessary in Bangladesh waters, assured the trainer, But he urged the majhis to get familiar with all-important English words like 'fire', 'engine trouble' and 'medical emergency'. This knowledge would be useful. The majhis had indeed heard these words before.

"Simply great" was the first reaction of Moktar majhi after the demonstration. He remarked "Cell phones don't work when we get to sea. During the day we can shout or use hand signals, at night all that we can do is pray. I never knew that we could communicate distress so easily." He asked about the cost and availability of the equipment.

The majhis felt that they could talk to their boat owners about equipping the vessels with VHF sets and handheld GPS. One majhi quipped *Amago jaan na houk, nuakatare bachaibar loge to mahajan lagaitei pare!* ("The owner should do this to save his boat if not our lives.")



served as crew or as majhis skippers in fishing vessels that operated at Dublachar in the Sundarbans. During the fishing season, they were away from home for 5 to 6 months. During this period, they stayed in the Sundarbans to catch *hilsa*, *suri*, *dhaisa*, *roopchanda*, ribbon fish, shrimp and *loita*. Said the fishers “We have no PPE. The plastic or water containers and floats are the only floatation devices. We do carry radio sets and cell phones, but the phones are out of signal range. We carry some medicines too. Diarrhea is a severe problem. Every year, two or three deaths occur on account of diarrhea.”



Dr Ahmed told the fishers about a simple method of purifying water using sunlight and plastic (PET) bottles. He said that water contamination was what caused diarrhea. (When fishers ran out of water during their prolonged stay in the Sunderbans, they drank from rivers or ponds.) But what the fishers could do was to fill up the PET bottles with water from a clean source, then place the bottles on the roof of the fishing vessel in sunlight. Exposure to sunlight for 4 to 6 hours in a sunny day neutralizes many of the harmful bacteria present in the water and makes it safer, said Dr Ahmed.

He also gave them advice on warding off the HIV infection, avoiding the use of tobacco products, vaccination of mother and child and the use of local food products – leaves and vegetables – to meet their dietary requirements. The fishers discussed their health



problems with the doctor and enquired about treatment in Cox’s Bazaar.

The workshop ended with a cultural programme that conveyed the messages of safety at sea and good health. A video documentary was made on the experiences of the fishers at sea and the problems a fisher family confronts when their breadwinner dies.

Another workshop the following day in another fisher settlement – Majhgonā jaladaspara, Chakoria Upzilla, Kutubdia. And another NGO, BASTOB, facilitated this workshop, held in the community hall of the Jaladaspara. The village had a cyclone-warning flag post maintained by the villagers. Dr Shariffuddin explained the objective of the workshop. Mr Zahirul Haque demonstrated the use of improvised marker floats as a floatation device.

The fishers shared their experiences on safety issues with the team. They said that piracy was a major threat; every year, hundreds of dacoities were common in the Cox’s Bazaar area. Communication was a major problem, they said. They carried cell phones (which didn’t work in



the sea) and transistors (which often broke down). The team advised the fishers about proper maintenance of transistor sets and about the need to frequently check the weather bulletin. The fishers complained that they were made to work even when cyclone signal 3 was announced. Said one fisher: “Catch rate of fish before a storm is high, hence the skipper encourages the crew to linger and keep fishing.”

Video documentary

Engine malfunction is behind much of the distress that afflicts fishing vessels out at sea. There are some 44 000 fishing vessels in Bangladesh of which a majority use engines for propulsion. Most of these engines are reconditioned – new engines are costly. Fishers believe that the reconditioned engines work well enough. But when they are not properly maintained, these reconditioned engines break down during a voyage and endanger the lives of crew.

The BOBP-IGO enlisted Mr M Srinath, an expert in engines, to help out with an educational video on engine maintenance for the fishers of Bangladesh. The first round of shooting for this video was done during 16-23 October in Cox’s Bazaar and Chittagong. It focused on basic facts about the common type of engines in use in Bangladesh, their availability, common engine problems faced during fishing trips, trouble-shooting practices, what engine-repair workshops could do, A leading engine repair workshop, Jalal Mechanical Workshop, provided the facilities.

A bilingual video (Bengali and English) is being prepared. It will be disseminated through the Marine Fisheries Office, Department of Fisheries, as well as through harbour management organisations and NGOs.