The fishermen in the small-scale sector are engaged in artisanal, motorised and mechanised fishing. In India hundreds of fishermen engaged in sea fishing do encounter with some or the other form of accidents including loss of life. Records have revealed that in mechanised fisheries sector in Kerala State alone 16 persons have lost their lives during 1990-'94 and three persons were reported missing during one season. No detailed figures are available on accidents faced by traditional fishermen.

Considering the risk involved in artisanal and mechanised fishing it is important that government and developmental agencies take steps to promote the use of sea safety measures by fishermen during fishing operations. The agencies such as International Maritime Organisation, International Labour Organisation and Food and Agriculture Organisation have expressed concern over the situation and stressed the need for popularising sea safety measures. Although some regulations are existing in the case of mechanised fishing, traditional
fishery sector has remained out of the perve of these regulations. It is important that the recommended measures be economically affordable and acceptable by the majority of fishermen.

An investigation on the awareness of fishermen regarding the minimum sea safety measures and the extent of their use was carried out in Palliport and Beach Road regions in Cochin where a number of fishermen are engaged in mechanised as well as artisanal fishing. Fifty crafts each from small mechanised and traditional sector were selected for the study. A list of safety equipments suggested by FAO was prepared to check their use by fishermen. Many of the measures include only simple and less expensive equipments that can ensure the survival of fishermen in the case of accidents. These include:

1. A first aid kit
2. Emergency rations (biscuits, glucose, drinking water, packed in air tight tins or cans)
3. Tools and spare parts for engines
4. A signalling torch and batteries
5. An oil lamp
6. A Fire extinguisher (for large powered boats)
7. One or more anchors, anchor lines and a sea anchor
8. A life line, lifebuoy or float
9. An emergency sail (for power craft)
10. A magnetic compass
11. A set of oars and paddles
12. A whistle, bell or hooter
13. A bucket for scooping water
14. A pair of signalling flags

The study showed that only a few fishermen were aware of the sea safety measures. More than 60 per cent of the small mechanised crafts used some of the suggested equipments such as spare parts, tools, lifebuoy, whistle and bucket. Food such as cooked rice, curry, pickle and drinking water were carried onboard by all the vessels. The magnetic compass was also used by 81 per cent of the mechanised vessels. Lifebuoy was used only by 30 per cent. The motorised and non-motorised crafts did not use any equipment specifically for sea safety.

Accidents generally occur due to fog and mist blocking the vision. During unfavourable weather conditions the risks faced by artisanal fishermen are high. The fishermen reported that by virtue of their long experience and intimacy with the sea they were able to make an intelligent guess on the possible mishaps. By studying the cloud pattern and waves they could forecast the possible calamity and thus take decisions regarding their safety. Most of the accidents occur so swiftly that fishermen do not get enough time to manage the crisis. During cloud bursts and torrential rains associated with winds the fishermen have to make use of their own skills to maintain the balance of their crafts. When there is an engine failure the boats anchor in the sea and await for other boats to tow and bring them ashore. There are also instances when the stranded boats escape the attention of other crafts and remain in the sea continuously for more than a day. The fishermen are generally ill-equipped for the care of the injured and the sick onboard. The fishermen engaged in mechanised crafts were found to have previous experience in artisanal fishing which helped them to escape from the mishaps. Several accidents occur while hauling the catch. Frequently injuries happen during fishing operations. Much of the actions depend upon the intuition and skill of the amarakkaran (leader), the most experienced among the crew who directs the craft and controls the fishing operations. Eighty one per cent of the fishermen forming the crew both in the mechanised and non-mechanised crafts selected for the study had more than 15 years of experience in sea fishing.

Many reasons were given by the fishermen for not using safety equipment. The equipment such as life jacket and lifebuoy are too expensive to be used regularly. During accidents neither do they get enough time nor will be in a position to pick up the items from their places.

The government mechanism in Kerala for ensuring sea safety consists of marine patrol boats kept ready to face an emergency and round-the-clock control room functioning during monsoon season. The Marine Enforcement and Vigilance Wing under the control of the Deputy Director (Zonal) in the maritime districts is assigned with the responsibility of enforcing law and order and sea safety measures. The equipments recommended for use in sea include life-jacket, lifebuoy, life rafts, lifebelt and fire-fighter. These items are essential requirements for obtaining registration for mechanised boat. Hiring of these equipments from private agencies and producing them at the time of registration is a usual malpractice observed among the boat owners. The members of the crew are of the opinion that each boat must be provided with minimum equipment to ensure their safety. Though most of the fishermen get information on weather forecast through the radio and newspaper the decision regarding fishing trip is made based on the weather report obtained at the time of departure.

It was seen from the study that the use of sea safety measures was not very popular among the fishermen operating mechanised and non-mechanised crafts and they relied mostly on their own wisdom and skill in saving their lives. Some kind of negligence is also seen on the part of the boat owners who often hire labour for fishing operations. The most urgent need, besides enforcing legal regulations is to educate fishermen regarding the use of safety measures. Training and other methods of intervention may be used to tell them about measures that could be adopted for management of crisis including the use of first-aid. They should be made aware of the need to invest their efforts in taking precautions to reduce the danger they face in their vocation.

* Prepared by Krishna Srithath and P. Rajeev, C.M.F.R.I., Cochin - 682 014.