Safety and health of fishers: Experts debate issues at international meet in Mahabalipuram, India

Glimpses – selective, recollective, not exhaustive – into the proceedings of the recent IFISH 3 conference held at Mahabalipuram, India. A fuller report is to be published later.



Fifty two fisheries scientists, researchers, doctors, planners and administrators from 13 countries took part in the Third International Conference on Fishing Industry Safety and Health (IFISH 3) at Mahabalipuram, near Chennai held from February 1 to 4, 2006.

Organised jointly by the BOBP-IGO, the FAO, and the Alaska Centre of the National Institute for Occupational Safety and Health or NIOSH, USA, the conference brought together experts from small-scale and commercial fisheries as well as from government, who debated many aspects of the subject. Mr P M A Hakeem, Secretary to the Government of India, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, inaugurated the conference. Representatives of the three organising bodies - BOBP- IGO, FAO and NIOSH - spoke at the inaugural session.

Nine technical sessions with 30 presentations spread over three and a half days followed the inaugural session. Health and safety in the fishing industry were discussed in many aspects and dimensions. The sessions were devoted to:

- Worldwide safety challenges facing the fishing industry
- Regional approaches to sea safety



- Safety equipment and training of crew
- Injury prevention and health promotion
- Small-scale vessels (2 sessions)
- Fishing vessel and equipment design, guidelines, constructions
- Responding to the problem
- International standards and status reports

A panel discussion after the nine sessions reviewed the facts, opinions and viewpoints expressed and future action needed.

Inaugural Session

Dr S S Tabrez Nasar, Senior Programme Advisor, BOBP-IGO, Mr P M A Hakeem, Secretary to the Government of India, lighting the traditional oil lamp

welcomed participants. In introductory remarks, Dr Yugraj Singh Yadava, Director, BOBP-IGO. noted the eventful journey of IFISH from Sitka (where IFISH II was held) to Mahabalipuram. IFISH 3 would have materialised earlier, he said, but for the 26 December 2004 Asian tsunami.

Introductory remarks were also made by the Director, Department of Fisheries, Tamil Nadu, Mr D P Yadav. He voiced concern about the safety problems faced by the state's fisher community following the tsunami. He said that resources for sea safety programmes were limited in Tamil Nadu; the State Government was looking at other possible sources of funds. He urged IFISH 3 participants to share information about search and rescue practices in their countries.

Dr Daniel Gustafson, FAO representative in India and Bhutan, noted the excellent collaborations the FAO had with the Government of Tamil Nadu as well as with the BOBP-IGO. The FAO was also collaborating with the ILO, especially in the wake of the tsunami. Some detailed scientific research effort was needed on the tsunami's impact on health, he said. IFISH 3 afforded an opportunity to discuss sea safety issues in this part of the world. The proliferation of new boats in the post-tsunami period had safety dimensions too. Fisheries management was another major issue, and sea safety had to be examined in this context as well.

Dr George A Conway, Chief, Alaska Field Station of NIOSH, said it was a pleasure to join hands with BOBP-IGO and FAO to put this conference together. He appreciated the BOBP-IGO's efforts in this context. He

acknowledged the support of Mr Brandt Wagner of the ILO.

In his inaugural address, Mr Hakeem noted that this was the first conference of its kind in India; safety and health issues are rarely the subject of international conferences. While IFISH 3 would discuss industrial and commercial-scale fishing, its focus would be on smallscale fisheries, which dominated the fisheries of developing countries.

The tsunami had killed a quarter of a million people, and made many more homeless and jobless. The absence of an early warning system and the lack of disaster management were mainly responsible for the scale of devastation. Absence of a proper system for boat registration, and of systematic data, compounded the problem of relief for fishermen. The tsunami had generated several lessons and forced a fresh look at the development agenda in India.

Mr Hakim said that the conference would seek to increase awareness and action on health and safety issues and

infuse confidence among fishermen. He hoped it would suggest practical measures to implement safety norms. Emphasis should be on proper design and stability of craft and on costeffective measures, and on special training for fishermen.

Some other issues that needed to be discussed were the introduction of a monitoring system for larger vessels, search and rescue programmes, and first aid for victims of injuries at sea, he said. IFISH 3 should take into account the Chennai Declaration of 2001 on sea safety for small and artisanal fishing vessels.

Speakers at the conference (L - R): Top - Dr George A Conway, Mr Ari Gudmundsson. Middle - Dr Daniel Gustafson, Dr P Paleri, Ms Ingrid Christensen. Bottom - Dr Vu Van Trieu, Mr Jim Sandkvist, Mr Hans Bage, Mr G Piyasena.

















What follows is a brief summary, session by session, of what happened at the conference.

Session 1: Worldwide safety challenges facing the fishing industry

Speaking on "Commercial fishing mortality: a worldwide problem," **Dr George Conway** said the FAO estimated the annual worldwide fishing deaths at 26 500 (estimated workforce: 34.5 million). Better mortality estimates are needed, and causes of deaths and injuries should be better understood. The benefits of satellite weather prediction and of simple devices like floatation vests and hand-held radios should be made available widely to artisanal and subsistence fishermen.

Mr Sebastian Mathew, Programme Adviser to the International Collective in Support of Fishworkers, Chennai, discussed the proposed ILO standards on safety and health in the fishing industry. He said the Work-in-Fishing convention sponsored by the ILO was strict in relation to larger vessels but flexible with small-scale vessels. He pointed out that smallscale fisherfolk in India now fished all over the EEZ and even beyond. Distinct categories of owner-skipper and workers, and an employeremployee relationship, had emerged in some small-scale fishing vessels. So had some problems. Example: Who is to bear the cost of medical treatment of fishermen?

Discussing the ILO's work on the safety and health of fishers,

Ms Ingrid Christensen,

Sr Specialist on Occupational Safety and Health, ILO sub-regional office for South Asia, said that seven instruments on the work of fishers had been adopted by the ILO. These will be consolidated into a single comprehensive standard. The ILO has been collaborating with the FAO in re-establishing livelihoods in tsunami-affected areas. Low-cost improvements are necessary in small-scale fisheries to prevent deaths while fishing.

Session 2: Regional approaches to sea safety

Mr Hans Bage of FAO presented a paper on behalf of Mr Agnar Erlingson, FAO/BOBP-IGO consultant who had done a twomonth survey of safety in small fishing vessels in India, Sri Lanka, Maldives and Thailand. (*Bay of Bengal News*, December 2005).

Some points from the paper: There seems to be a lack of interest in the safety of fishing vessels below 12 metres. Guidelines should be evolved for such vessels too. (The FAO responded that guidelines had just begun for vessels under 30 metres in length.) Some restrictions on fishing should be stipulated for open-access systems. All boats should be registered. A distinction must be made between "disasters" and "personal injuries".

Mr G Piyasena, Director-General in the Department of Fisheries and Aquatic Resources, Sri Lanka, discussed the status of sea safety programmes for small and commercial fishermen. Tsunami relief effort had triggered a big rise in the number of fishing boats, but many of these boats were substandard. Some 500 to 600 canoes lie useless on beaches. The Government is framing regulations on boat construction with assistance from the FAO and the Government of Italy, while stock assessment would be initiated with donor assistance. Sri Lanka lacks an early warning system, also a sound system for vessel monitoring, control and surveillance.

During discussion, it was pointed out that a proper certification system for boats is lacking in Sri Lanka. Vessels are constructed by persons with traditional skills handed down from one generation to another. Some small vessels go deeper in search of fish, though they are not equipped to do so; they run into both safety and legal problems. One participant suggested that Sri Lanka's full fleet strength after the tsunami should be evaluated.

Mr Jim Sandkvist (Sweden) discussed the SSPA's Integrated

Coastal Zone Development Programme and SIDA's International Training Programme for small fishing vessels in a presentation on "Small vessel safety – coastal fisheries development". He urged registration of small fishing boats, and better coordination between vessel monitoring and community participation programmes to strengthen safety at sea. He also suggested that safety training be imparted to wives of fishermen.

Session 3: Safety equipment and training of crew

Mr Alan Davis, safety & compliance manager of the American Seafoods Company which has 12 fishing vessels, made a presentation on "Safety eyes" – the effort to make everyone look out for safety hazards.

Mr Davis said that repetitive training, constant re-enforcement, management commitment and safety inspections had together ensured that more people in his company had developed "safety eyes". Just as fishermen are constantly scanning the horizon for signs of bad weather, they should scan surroundings for safety hazards, then take action to overcome them. Use goggles, he urged fishers at sea. It will mean less exposure to harmful rays, smaller incidence of cataracts.

Mr Ken Lawrenson of the US Coast Guard made a presentation on drills and training in the commercial fishing fleet of the Northwest United States. He said monthly drills and training were required by law in US commercial fishing vessels. Crew failure to put their gear to proper use was a major cause of fatalities.

Session 4: Injury prevention and health promotion

Prof Olaf Jensen, senior researcher from the University of Denmark, presented a paper that classified work processes and injuries in fishing vessels, thereby providing insights about injury patterns. The work processes most associated with injuries: preparing, shooting and hauling gear (44%), moving about the ship (14.7%), cleaning the catch and catch handling (13.9%). Fatalities accounted for 5 percent of all detected injuries.

Mr Grant Tracy, Director of safety of Standfast Corporation based in Brisbane, Australia, presented a paper on controlling the risks of falling overboard from fishing vessels. He said that floatation devices and immersion suits would preserve life while in water; to prevent the risks of falling overboard, a practical and safe working system was needed. This would include a self-locking, selfretracting deck tether attached to a personal floatation device.

Mr Bradley Husberg presented a paper by him and Jennifer Lincoln (both from the Alaska Field Station of NIOSH) on severe injuries that occurred on commercial fishing vessels in Alaska. Most of these occurred on deck during the deployment and retrieval of fishing gear. Between 1991 and 2002, 798 severe non-fatal injuries occurred. Falls accounted for 25 percent of these injuries; machinery and fishing equipment for 23 percent.

Session 5: Small-scale vessels-I

Mr Bundit Chokesanguan of SEAFDEC's training department described the status of sea safety programs for small-scale and commercial fishermen in Thailand. He said the responsibility for fishing vessel safety is shared by many government departments; this makes for ambiguity. A clear definition is needed about small fishing boats and their operational range. Radios carried by fishers in mechanised boats, storm warnings on radio and television, community programs carried out by fishermen's cooperatives – all these promote safety at sea. Poor equipment in commercial vessels was what most endangered safety at sea. In 2003, SEAFDEC organised a regional workshop on safety at sea for small fishing boats. Guidelines are being planned.



An IFISH 3 session in progress

Discussing sea safety awareness in small crafts, **Mr Mats Rosander-Liew** of the Swedish Maritime Administration said Sweden had 30 years of experience in making small craft better aware of safety. Television and other mass media played an important part in the process. Family members including women and children had to be approached for long-term success with adoption of safety measures. "They often constitute a powerful pressure group for behavioural change."

The speaker said a large number of small boats were active along a 2 700-km coast in Sweden. Sometimes the boat traffic was very heavy. The Swedish Government wished to reduce the casualty figures at least by half. This had been done in the Navy. Awareness programs are being disseminated to schools as well.

Mr D P Yadav, Tamil Nadu Director of Fisheries, described sea safety programmes for fishermen in his state. (See pages 30 - 32). In discussion following his paper, it was pointed out that 12 to 15 percent of fishermen go beyond 12 nautical miles from the shore. The Coast Guard is better geared for search and rescue operations than the state government. Efforts are being made to improve insurance coverage for boats. Session 6: Small-scale vessels-II Commandant N V Rama Rao of the Indian Coast Guard (ICG) described the economic dimensions of search and rescue operations. He said that SOLAS (Safety of life at sea) and GMDSS (Global maritime distress and safety system) regulations did not apply to smallscale fishing vessels. The ICG is responsible for protecting fishermen and assisting them at sea. The Indian region for search and rescue (SAR) comprises 4.6 million sq km. SAR entails an annual expenditure of approximately Rs 42 million. There is presently no SAR agreement with Sri Lanka, but SAR operations are carried out ad hoc by agreement. ICG is a lean and thin organisation; at present, 90 percent of its efforts are directed at fishermen. He felt the need for a low cost EPIRB, costing around Rs 10 000; right now, it costs five times as much. He urged fishermen to use the Coast Guard's toll-free number (1718) during emergencies at sea.

Dr Jonathan Dickson of the Bureau of Fisheries and Aquatic Resources in the Philippines described sea safety programs for fishermen in his country.

Commandant S D Sonak of the ICG made a presentation on "Issues associated with small-scale



Mr Alan Davis, American Seafoods Company, speaking on "Safety Eyes"

fishermen at sea". Making the point that small-scale boats vary in size and shape in each coastal state of India, he urged that identity cards should be issued to fishermen.

Dr Vu Van Trieu, Acting Director-General in the Department of International Cooperation, Viet Nam, described commercial fishing in his country. He said that fishing engages more than four million people; marine stocks in Vietnam are estimated at 4.2 million tonnes; small-scale fishing vessels are lowpowered, equipment is rudimentary. Fishing vessels of horsepower greater than 90 H P are registered. He suggested regional cooperation in sea safety. Training-of-trainers is the modus operandi for training programs.

Session 7: Fishing vessel and equipment design, guidelines, construction, etc.

Mr Robert W McKibbin, mining engineer at NIOSH, Spokane, Washington, discussed the development of devices such as an emergency-stop system for a hydraulic deck winch. The instrument would cost about US \$ 2 200 inclusive of fitting and welding charges, but the cost could go down if it is produced on a mass scale.

Dr B Meenakumari, Principal Scientist of the Central Institute of

Fisheries Technology (CIFT), Kochi, India presented a paper on "Alternate material for small-scale vessel construction" co-authored with Mr M V Baiju and Ms Leela Edwin. The high cost and scarcity of conventional wood species are making alternatives necessary, and the CIFT is looking at them. The paper described an aluminium canoe, the process of constructing a rubber wood canoe, and the sheathing of a wooden canoe with FRP, and evaluated their technoeconomic feasibility.

Dr V S Somvanshi, Director-General, Fisheriy Survey of India (FSI), described his organisation's vessel monitoring system (VMS). In co-operation with the Indian Space Research Organisation, a reporting system has been developed that gives FSI information from fishing vessels at sea about their position, depth, catch effort and species. Safety signals can be transmitted. It is proposed to extend the VMS to deep-sea fishing vessels and later to mechanised boats.

Dr Henri Pinon of the Institut Maritime de Prevention, France, presented a paper on sea safety studies conducted by his non-profit institute. It collects and analyses report forms that fishermen must complete in the event of injury. These provide data about the injured person, the ship and the type of fishing being done, the circumstances (date and hour, meteorological conditions, position of the ship, location of the worker, what he was doing when accident occurred) and the injury. The annual rate of occupational injury was 143 per 1 000 fishermen in sea fishing, as compared to just 44 injuries per 1 000 workers in other sectors.

Session 8: Responding to the problem

Dr Y S Yadava, Director of the BOBP-IGO, described the efforts of the IGO in co-operation with member-countries to improve safety at sea for small-scale fishermen. The Chennai Declaration of 2001 recommended a regional sea safety programme. During discussion, it was pointed out that lack of data on accidents and injuries was a major drawback. A data collection mechanism ought to be developed for use by member-countries of the BOBP-IGO.

Mr Than Oo Wai, Deputy Director, Department of Fisheries, Myanmar, discussed the status of sea safety programmes for fishermen in his country. He said that artisanal fishermen account for most of the catch. There is a registration system for fishing boats. Most fishermen use home-made life rafts such as plastic containers and drums, and traditional medicines. Most fishing boats operate in remote areas; communication with them is poor. Co-operation with regional and international organisations is needed to solve existing problems.

Discussing the role of gender in sea safety programmes, **Ms Chandrika Sharma** of the International Collective in Support of Fishworkers, Chennai, urged a comprehensive approach to reducing the vulnerability of coastal fishing communities to natural disasters on sea and land. It is women who have often taken the lead in highlighting problems of sea safety and in work conditions. During discussion on the paper, Dr George Conway said fisher groups in Chennai had told him that HIV/ AIDS was a major health concern. A community health model should be adopted to tackle this concern. He also lauded the micro-credit programmes of south Asia which were spearheaded by women and improved the quality of life of the community.

Session 9: International standards and status reports

Mr Ari Gudmundsson, Fishery Industry Officer, FAO Rome, described the evolution of international instruments on the safety of fishing vessels and fishermen, and the status of implementation. The FAO has prepared the FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels (Parts A and B) as well as the FAO/ILO/IMO Voluntary Guidelines for the Design, Construction and Equipment of Small Fishing Vessels. These documents have been revised recently and will be published soon. Mr Gudmundsson's paper also highlighted concern for small fishing vessels which are not covered by any standards. He said that a website had been set up for the purpose, and invited suggestions.

Replying to questions, Mr Gudmundsson said that one problem with safety standards for developing countries was absence of data. He urged participants to help in improving the status of data collection. Sri Lanka is being helped with documentation of sea safety programmes. He admitted that women and families have not been specifically addressed in any guidelines prepared so far. Safety instruments can be useful only if they are implemented and enforced; this is mainly the responsibility of governments. Political will is essential.

Mr Ali Majid from the Ministry of Fisheries, Agriculture and Marine Resources, Maldives, discussed sea safety programmes in his country. (Paper co-authored with Mr Ahmed Hassan.) He said that his government is presently working on developing vessel construction and standards and on providing technical support by introducing optimally designed and efficient fishing vessels.

Mr Hans Bage of the FAO mentioned the possibility of the Swedish International Development Agency (SIDA) funding a regional programme on sea safety in the Bay of Bengal region. It will be part of a global programme on sea safety.

Mr Dennis Hansford of the US Department of Commerce discussed "Safety standards for observer deployment in commercial fishing vessels". He said the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service trains hundred of fisheries observers annually. These observers are deployed on commercial fishing vessels. Safety training is provided to all the observers.

In the discussion at the end of this session, it was suggested that India's Planning Commission should address the question of safety of fishers in its 11th Five-Year Plan, something that had not been taken up in the past.

A participant suggested that representatives of the fisher community should also be invited in future IFISH. Another suggested a regional conference supported by the government that looked at specific regional issues.

Panel Discussions

A few of the many points made during a lively panel discussion that followed the nine technical sessions:

- In future, more stakeholders should participate in conferences of this kind.
- Awareness on sea safety issues should be promoted at all levels, starting from that of policymakers. Language in such literature should be simple and clear to all.
- Knowledge on safety issues should become a part of the university curriculum. When government agencies give fishers a loan, they should exact a

commitment from them about using safety equipment.

- The FAO requested participants to make available national regulations on sea safety.
- The conference did well in discussing both small-scale and larger fishing vessels. Many fishers today are going deeper or increasing their range, without the right know-how. Result: more accidents. All countries must make an effort to study what kinds of fishing activities are going on. Best practices should be documented and shared widely. A good balance is needed between 'hardware' and software'.
- Communication gadgets and equipment need to be modernized to improve sea safety. More group discussion needed among participants at such conferences, since the state of fisheries differs from one country to another.
- Short films can be very effective to promote sea safety. BOBP used to produce posters, these should be distributed and disseminated more widely and displayed.
- Such conferences are very useful for Europe, which used to be underrepresented in the past. Support from ILO and FAO has made this possible.
- US Coast Guard: Two important issues are insurance arrangements for fishers and use of weatherproof equipment. For a local fishermen here, GPS equipment would be most useful.
- Fishers need life jackets. The government should address this issue in its next Plan.
- Fishery Survey of India: FSI conducts several workshops for fishers – about new technologies, about diversifying and limiting the pressures on fishing grounds. A workshop was conducted in Goa in 2000 under FISHCODE. We would like to conduct more such workshops.
- NABARD: We would like a list of the many kinds of sea safety

equipment relevant to this region, and the cost. Also, is there any development strategy with multistakeholder participation to upgrade the knowledge of fishers?

- Denmark: No focus at this conference on injury prevention in fishing related activities. No precise or comprehensive data was available on fatal and nonfatal injuries. This can be obtained only by involving fishers, their families, politicians and epidemiologists.
- The Code of Conduct for safety of fishing vessels should be implemented. The Government of India's thrust in fisheries has been only on production, safety and management of fisheries has not been given priority.
- SEAFDEC: We need to obtain the views of fishermen. How can international instruments be implemented without their involvement?
- FAO: The cost of SAR operations must be lowered. Savings from such reduction could be used to subsidise sea safety measures. The FAO is working with Swedish authorities on sea safety interventions. Important components are data collection, regulation and community participation. Future IFISH meets should be so designed that the fisher community is involved. We must move IFISH from rhetoric to action.
- Sweden: This is our first IFISH meeting, and it will not be the last. There was so much to learn, and there were many issues. "We must endeavor to reach the local fishermen, this will be a big step for IFISH. At the next IFISH, results of activities carried out after IFISH 3 should be presented."
- Vietnam: Sea safety information should be disseminated through popular literature and TV. Fishers should be given the right knowledge in the right way. They



US and Indian Government officials at the conference

will never react to a term like "Torremolinos".

- CIFT: No safety equipment in small-scale fishing vessels, no data on fatalities. We need to promote awareness, training and extension, with support from ILO and FAO. CIFE and CIFT should make sea safety a part of their curriculum. R & D Institutes should take up projects on safety equipment. Safety aspects should be made mandatory when bank loans are given.
- US Coast Guard: Future challenges concerning sea safety relate to government regulation, awareness, outreach programmes and data organisation and collection.
- CIFE: Mechanisms needed to collect data on sea safety. The CIFE website contains a compendium of all marine fisheries regulations in India. Social issues should also be looked at — such as the monsoon ban on fishing and keeping fishermen productive during this period. We can conduct training programmes for fishermen on sea safety.
- FAO: The CIFE compendium on maritime regulations, if made available to FAO, can help us prepare a global compendium on marine fishing regulations.
- The organisers should be congratulated for bringing IFISH 3

to the heart of fisheries, as Asia is the hub of small-scale fisheries.

- ICSF: (a) Sea safety and resource management are two sides of the same coin. Our mindset is attuned to near-shore fisheries. So even if small-scale fishers move offshore, we still talk about nearshore fisheries. (b) Sea safety depends largely on awareness, prevention and mitigation. We must document some of the best practices. Visual documents can be excellent awareness instruments. (c) We must define sea safety. Presently, many interpretations are given to sea safety. (d) We must follow the debate on sea safety in the WTO. It is generally negative about all subsidies, but does not question the subsidies given for sea safety. This development can be used to promote sea safety. We must also maintain a balance between hardware and software.
- SEAFDEC: We invite cooperation with BOBP-IGO, FAO and NIOSH in Southeast Asia. The media should be tapped to promote sea safety. SEAFDEC has competency in VCD production, we can help produce documentaries on sea safety. During the last 2 years, 20 VCDs have been produced on shrimp fisheries and other subjects.
- Maldives: Special monitoring centers are needed to monitor the

safety of small boats. Fishermen may be provided with VHF sets on an installment basis. Study tours and practicals should be a part of the programme for IFISH 4.

- FAO: SAR has become very expensive. VHF devices are the cheapest sea safety tool. Their range is up to 25 nautical miles, and it can be extended to 50-60 nautical miles. A cost-benefit study should be undertaken on available communication mechanisms for small-scale fisheries. For creating awareness on safety issues, travelling seminars or road shows would be useful.
- Indian Coast Guard: We have moved to the GMDSS system, and coastal radio station networks should be established. A common coastal radio network will be more useful than a network only for fishermen.
- US Coast Guard: Insurance and training should be important components of fishing safety. "If I were a local fishermen, I would use a 406 EPIRB that would give me weather warnings and GPS

and also allow me to communicate with the family.

- Fishery Survey of India: The FSI has seven zonal bases, which conduct a dozen workshops every year for marine fishermen. These workshops focus mainly on resource management and demonstration of new equipment. But henceforth, such workshops could also cover sea safety and the health of fishers. FSI would like to conduct workshops on MCS in association with BOBP-IGO.
- NABARD: The skills of smallscale fishers should be upgraded, and support should be provided for the purpose. NABARD can fund entrepreneurship development programmes. We can include sea sea safety equipment in bank loan schemes if a list of such equipment along with cost is made available to NABARD.

Closing Session

"Agreement is nice but action is better," said Dr George Conway at the closing ceremony of the

Participants at IFISH 3

conference. He said that improvements are needed in the areas of communication, equipment & materials, training, community health approach, data collection and surveillance mechanisms.

Mr Ari Gudmundsson said case studies on safety improvement must be documented. Political will is essential to improve the safety of fishers worldwide.

Dr Prabhakaran Paleri (Coast Guard Director-General. New Delhi) said the Indian Coast Guard would be very happy to support measures to enhance the safety of small-scale fishers. He said that health, security and environment are correlated; so is the relationship between fishermen, boats and the environment. In conclusion he raised a few questions: Will the fishermen population increase or decrease? He also made the point that the SAR mechanism is oriented to merchant vessels and cannot really meet the requirements of fishermen. Can a different approach be designed for fishermen, a community approach? (For more details on IFISH3 visit www.ifish3.org)

