



The Journal of the Bay of Bengal Programme
Inter-Governmental Organisation

25 Years of the Bay of Bengal News

A success story in development journalism

Bay of Bengal News has been a trend-setter in development journalism in fisheries. This silver jubilee issue of the extremely popular newsletter recapitulates its contributions to the development of small-scale fisheries in the Bay of Bengal region.



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25 Years of the *Bay of Bengal News*

A success story in development journalism



The Bay of Bengal News (BBN) has entered upon its 26th year – after 80 issues, about 1 000 articles and several hundred photographs. This issue goes beyond the statistics to recall highlights of a quarter century of a small but power-packed newsletter. We have also recorded the perceptions of some readers about BBN – what it has meant to them, how well it has chronicled the many-faceted multi-disciplinary work of BOBP in helping small-scale fisheries and fisherfolk communities in the Bay of Bengal region.

I first came across the *Bay of Bengal News* during the late 1980s. An article on shrimp fry culture in West Bengal, India, caught my eye. I haven't missed another issue of BBN. It reported and analysed work of the Bay of Bengal Programme – concerning technologies and socio-economics in small-scale fisheries and the lives of fisherfolk communities in seven countries surrounding the Bay. The BBN was always well-researched, concisely and beautifully presented – a pleasure to go through. I carefully preserved every issue in a leather-bound jacket. Little did I realise that I would one day be the editor-publisher of the BBN.

In 1981, when Bay of Bengal News was born, small-scale fisheries was little-known and little documented. What it did for national economies, food and nutrition security and livelihoods was neither understood nor recognised. Over the years, BBN not only raised the profile of small-scale fisheries but became synonymous with it.

The Bay of Bengal News marks a happy blend of professional expertise in both fisheries and journalism. In other fisheries journals, scientists have doubled up as editors. Result: both readability and presentation have suffered.

The inputs that a talented journalist-editor can bring to a technical journal are many. He writes for the reader, something scientists normally don't manage to do. In fact simplicity, clarity and lucidity are the three characteristics of good writing, according to Somerset Maugham, who himself exemplified these three virtues. BBN considers these as essential. And brevity as well. At BBN we try hard to ensure that every word carries weight.

A few thoughts about editors. They have been compared to architects. Both turn out products that must be functional as well as attractive. Both must pay attention to detail. An

architect ensures that every brick or tile, every nut or bolt, is in the right place. An editor is fiercely particular too: fonts should be of the right size, shouldn't clash, columns should align, subheads should not be broken between lines. When an article opens with a two-page spread, the heading, sub-head and photograph should reinforce each other with a single message, not put out different messages.

The editor strives for maximum impact with every article. Is the article too dull? What can be done to liven it up? Would a photo essay lend an additional new dimension to the theme? How best can photographs for such an essay be organised? Would an anecdotal box brighten coverage? Can the artist come up with an imaginative illustration?

A professional, creative artist is indispensable for a magazine that takes design seriously. His perceptions of an article's message

and meaning may be entirely different from that of others. The editor-artist interactions can lead to wonderfully creative and imaginative ideas for eye-stopping visuals. This is behind the presentation style of *Bay of Bengal News*. The BOBP has been enlightened enough to respect professionalism in preparing and presenting information. Its sagacity has been well rewarded.

Should a fisheries magazine focus so much on the minutiae of presentation? The success of *Bay of Bengal News* provides the answer.

It is not surprising that *Bay of Bengal News* has surpassed the technical reports of BOBP in popularity. Even scientists prefer to read the short, illustrated summaries of technical work that appear in the BBN rather than the more thorough and rigorous scientific reports – at least initially. Very often, of course, they first read the BBN article, then go to the report.

The *Bay of Bengal News* was an important dissemination tool of the BOBP. It remains so during the BOBP's IGO *avatar*. Inter-country co-operation is an important feature of our content today. So is awareness-raising. We frequently bring important publications (of the UN, of international agencies) to the attention of the region. So also

important meetings. With the present issue, we begin a series of articles on leading fisheries institutions in the region.

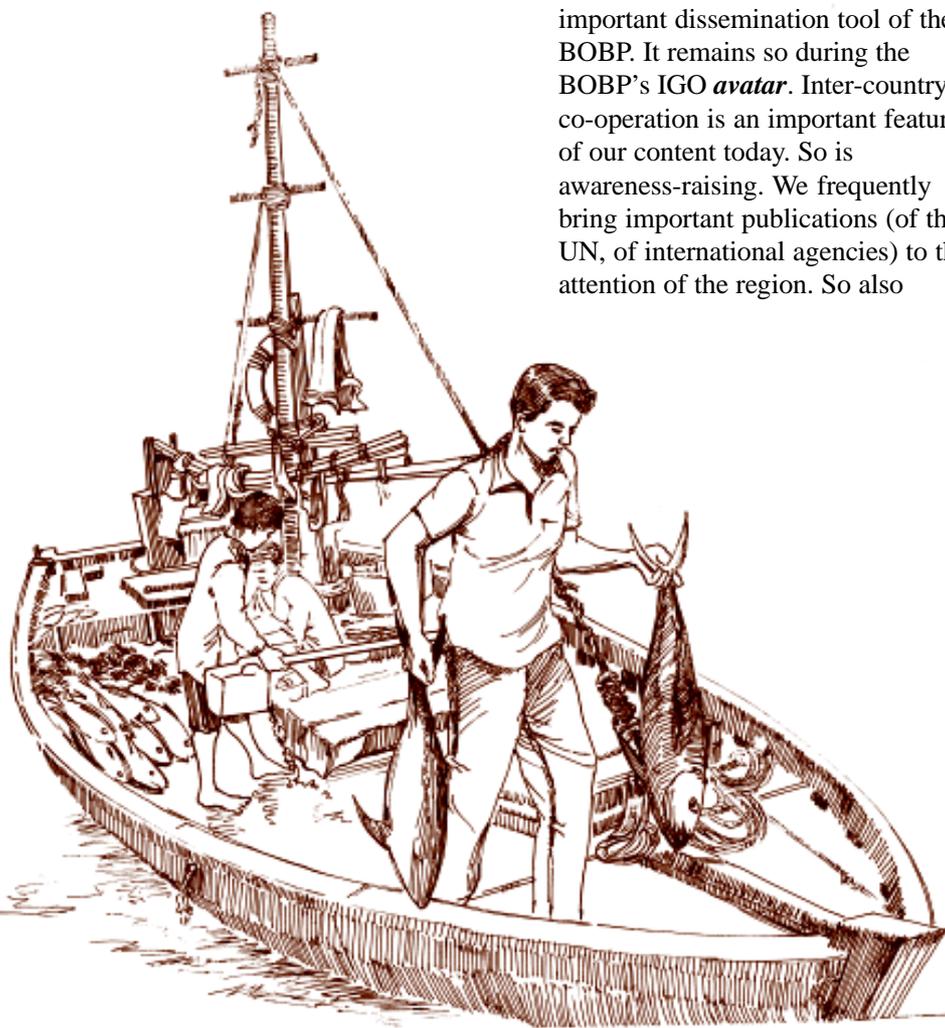
In 2001, the BOBP produced a CD-ROM from the first 71 issues of BBN (1981- 2000). It was an instant hit and continues to be in great demand. We plan to update the CD-ROM with later issues of the BBN. Eventually, our website (www.bobpigo.org) will also contain back and current issues of BBN. This will enable universal access to *Bay of Bengal News*.

During its two main periods of transition – between the second and third phases, between the third and IGO phase – the BBN was irregular, and a few issues had to be combined. This was unavoidable, with staff and activities having been reduced to a bare minimum. But during these periods, we were snowed under with queries and complaints, a reflection of what BBN meant to readers. With the IGO now having been established on a firm footing, we can promise unerring regularity in publication and periodicity.

Apart from changing subject orientation, BBN has kept pace with technology as well. Today, the pre-press part of newsletter work is done entirely in-house. Our only interaction with the printing press occurs at the very end, when we hand over a CD. This is in striking contrast to the every-day interaction during the first decade of BBN. In future, we plan to reach fisherfolk communities as well, through vernacular editions of the BBN.

The *Bay of Bengal News* has been a keen and conscientious chronicler of development – both of BOBP and of small-scale fisheries. It will remain so, and continue to pursue the highest standards of development journalism.

—Y S Yadava



Tuna landings in Malé, Maldives



Bay of Bengal News: Lessons for the Future

by Arne Andreasson

A distinguished Swedish fisheries expert analyses the role and relevance of Bay of Bengal News (BBN) for development, as well as the future of the BOBP-IGO as a regional forum.

Bay of Bengal News is 25 years old, a respectable age for the newsletter of a development programme. How did it become a success and what can we learn from *Bay of Bengal News*?

I remember the first publisher postponing the launching of the newsletter for two reasons. He said that you need a long-term commitment and you must have something to say.

The BBN has evolved over the years and has become a household name in fisheries circles around the Bay of Bengal. The basic criteria for a successful newsletter remain the same as those defined by the first publisher.

First, you have to be able to commit yourself, your organisation, to publish more than the odd issue and publish regularly. You also need to define your target group. The BOBP had poor fishermen and their families as the ultimate target group. The newsletter would not have been an effective tool to reach that target group directly. Instead, the target groups for the newsletter were fisheries administrators and managers, scientists, other projects and programmes, and mass media.

An important criterion for a successful newsletter is that what you write must be relevant. The content must be appropriate for your target group and must be useful. And by choosing the content carefully, the *Bay of Bengal News* was relevant. It reported on issues faced by fisheries administrators, project staff and fisherfolk in the region, it described in popular terms the

approaches and methods the Programme used for its activities and surveys. And it reported on results - both successes and failures.

Finally, the BOBP hired a professional editor and professional artist. This is a lesson future newsletter publishers should remember. The professional approach ensures that the information is presented in a way that can be understood by the target groups, and with a lay-out that stimulates reading.

I had the privilege to work in the BOBP some 20 years ago. After my stint with the Programme I moved to Africa to start another regional FAO Programme. It followed the model of the BOBP, although with a more limited mandate (small-scale aquaculture). After a couple of years with ALCOM, it was time for us also to establish a forum for exchange of information in the region. The way forward after analysing the success of the *Bay of Bengal News* was obvious; make a long-term commitment, be regular, be relevant, use a language and a lay-out which stimulates your target group to read and to contribute. And hire a professional as editor.

We did not have the same resources in ALCOM as in the BOBP. But we managed to hire a professional, the first Editor of *Bay of Bengal News!* He produced *Alcom News* with contract help for layouts. *Alcom News* became a success story too.

Twenty-five years after *BBN* and with a revolution in communications today, it is relevant to ask questions about the future. The BOBP has

become the BOBP-IGO, an inter-governmental organisation. What demands does that change imply? We have instant communication via Internet. What is the role, if any, of a newsletter in this age?

The BOBP-IGO is the natural follow-up to a long-lasting development programme. Although geographically more limited than the original programme, the new organisation serves the purpose of exchange of information – also as a possible platform for development interventions. We have seen the subjects for the BOBP change over the years. From very technical activities in boat and gear development – to extension methods, socio-economic issues and gender issues – to fisheries management in a broader sense.

Recently the BOBP-IGO organised a conference on safety at sea, a long-neglected subject in fisheries development! Other issues which are likely to become more and more important over the coming years are the quality of the final product, quality assurance, traceability – to name a few. BOBP-IGO is a forum that can take up these issues; it is also an efficient tool for regional activities. Donor agencies would be wise to note this and use the IGO. And member-countries would be wise to support the organisation and widen its membership.

The BOBP-IGO is needed to supplement the more research-oriented institutions of the region, not to compete with them. There is need for a forum for practical fisheries management in which fisheries administrators and managers can meet, share information and take joint actions to conserve the fragile fisheries in the Bay of Bengal.

And the newsletter? Whatever form it may take in the future, a print newsletter linked to a website is essential. The lessons from the last 25 years are still valid: long-term commitment, regularity, relevance and professionalism!

Indian Coast Guard in the Bay of Bengal: Economic Dimensions of Search and Rescue

Commandant NV Rama Rao, *Officer-in-Charge, Marine Rescue and Coordination Centre, Indian Coast Guard, Chennai*

An abridged version of a paper presented by the author at the recent Third International Fishing Industry Safety and Health Conference, held in Mahabalipuram from 1 to 4 February 2006.



India is a major fish producing country and fisheries is an important source of foreign exchange earning. It is also an instrument of livelihood for a large section of the economically backward coastal population.

Approximately six million fishermen from more than 3 930 villages in India fish in the coastal waters and on the high seas. Of these, 2.4 million are full-time fishermen, 1.45 million part time, the rest are occasional fishermen. Many of these fishermen do not carry basic life-saving equipment or SAR (search and rescue) alerting devices. They are therefore extremely vulnerable when disaster strikes, despite round-the-clock effort by SAR authorities.

Some 200 000 traditional crafts, 55 000 beach landing crafts with outboard motors and 51 000 mechanised crafts fish in India. The average length of these boats varies between 15 and 18 m (45-50 ft). None of the conventions such as SOLAS or GMDSS apply to them – since the Government of India’s Distress & Safety Communication Rules, 1995 cover only fishing vessels more than 20 m in length. The salient features of these rules are:

- Vessels are to carry at least one float free EPIRB & one Search and Rescue Transponder (SART),

- VHF set manning channel 16 and capable of receiving and transmitting distress alerts on VHF DSC channel 70.
- Other mandatory requirements as per GMDSS.

Indian Coast Guard

The Indian Coast Guard was constituted under the Coast Guard Act, 1978. One of its “charter of duties” is to protect fishermen and assist them when they run into distress at sea.

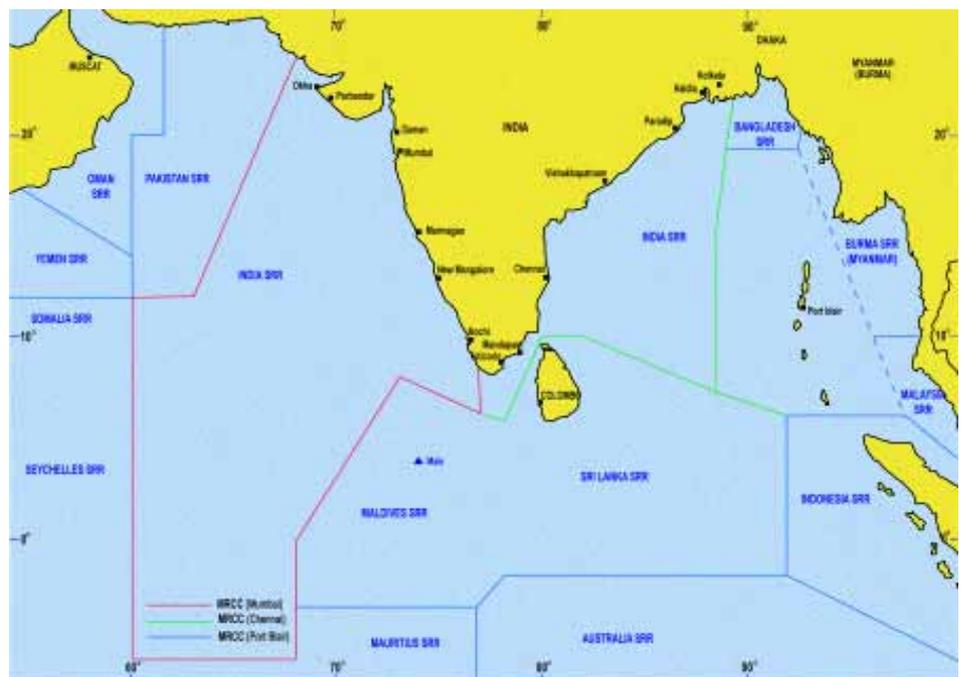
The Coast Guard has been helping fishermen on the basis of requests received from state governments by Coast Guard Commanders located in each coastal state. A schematic diagram is shown on page 6.

India acceded to the International SAR Convention 1979 in 2001. The following year, the Coast Guard was designated the nodal agency for coordination of SAR in the Indian Search and Rescue Region, measuring 4.6 million sq km (see figure 1).

Under the SAR Convention, the Coast Guard set up a National SAR Board, a chain of Maritime Rescue Coordination Centres (MRCCs) and a computerized ship-reporting system. In order to effectively coordinate SAR missions, MRCCs have been established in Mumbai, Chennai and Port Blair. These are assisted by a series of sub-centres located at the district headquarters of each coastal state (see figure 2).

All Coast Guard ships, shore stations and MRCCs/ MRSCs are equipped with GMDSS equipment

Fig 1. Indian Search and Rescue Region



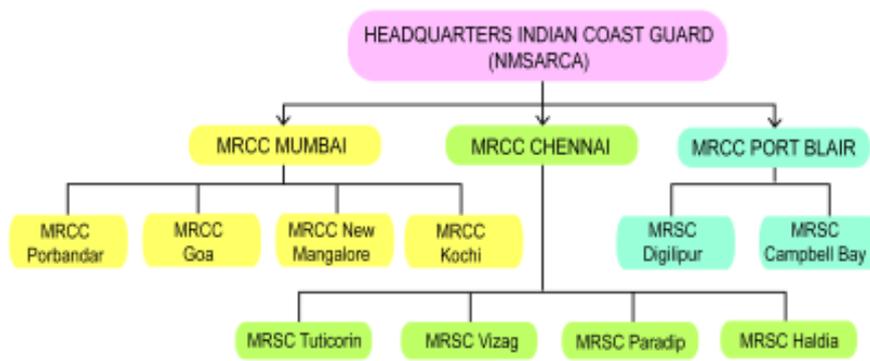


Fig 2. Indian Coast Guard Search and Rescue Organisation

comprising INMARSAT terminals, etc. Distress alerts from vessels are received at the MRCCs. Using the database of registered vessels with INMARSAT terminals, communication is established with the vessel by phone, fax or telex to ascertain the nature and type of distress and the assistance requirement.

Besides the resources available with the National SAR Coordinator (Director General, Coast Guard – DGCG), several other authorities and facilities can be requisitioned for carrying out SAR operations – such as ships/ aircrafts/ shore-based facilities with the Navy, the Air Force, the DG (Shipping), Customs and State Maritime Boards, and State/ Central fisheries authorities. The SAR authorities levy no costs for Search and Rescue of lives at sea.

SAR for Fishermen – Bay of Bengal

The Coast Guard has so far saved 3 342 lives since inception. In 2005 alone, 49 lives were saved through 34 SAR missions. Of these, 27 were fishermen in the Bay of Bengal. 49 cases of missing/ overdue fishermen were reported to MRCC Chennai and other MRSCs of this region.

In some cases, the fishing vessels returned safely before Coast Guard units were deployed. A total of 50 ship days and 67 hrs of air sorties were undertaken for SAR of fishermen alone in various SAR missions. The cost incurred during these operations was approximately Rupees 41.8 million.

The costs incurred by merchant ships can't be calculated with any degree of accuracy. The cost of diverting a merchant vessel to SAR operations is much more than the operating cost; the delay caused to the voyage adds substantially to costs. Therefore, the SAR services of merchant ships can't be cost-quantified.

SAR Deployment

Most fishermen do not carry any communication equipment or minimum life saving appliances onboard while venturing into sea. No emergency can be communicated to any vessel in the vicinity or shore authority. If a vessel capsizes suddenly, its fate is sealed in the absence of life-saving appliances. Most fishermen do not stick to their schedule or area of operation; at times, they delay their return according to the fish catch.

Sometimes, local authorities fail to report the safe return ashore of fishing boats and crew. Result: Coast Guard SAR units continue a vain search for the vessels and lives in distress. Unnecessary searches entail an expensive waste of SAR's assets and efforts. State fisheries authorities have been told about this many times in the past.

Our fishermen cannot afford EPIRBs and other sea safety equipment. But they have been persuaded to carry at least the bare minimum that's essential – such as life jackets and portable radio communication equipment.

An aircraft is the best and fastest means of locating a vessel in distress. If the latter can answer or

respond to the aircraft during communication search, a rescue can be effected quickly.

Case Studies

Sri Lankan Fishing Boat *Lak Mali*

On 26 March 2005, MRCC Chennai received a telephone call from the Defence Attaché, Colombo. A Sri Lankan fishing vessel, *Lak Mali*, was disabled and adrift. Its approximate position was given. The assistance of the Indian Coast Guard was sought to search and locate the vessel.

Immediately, the Coast Guard vessel *Kittur Chennama*, then at sea, was diverted to locate the disabled fishing vessel. Two other vessels from Chennai – CGS *Ranijindan* and CG Dornier aircraft – were deployed for a SAR mission on March 27, 2005. The authorities in Sri Lanka were contacted regularly by MRCC, Chennai and the CG ship to ascertain the last known position of the fishing boat. International Safety Net messages were transmitted by MRCC Chennai at 12-hour intervals from the evening of 27 March till 31 March 2005 to report sighting by merchant vessels transiting through the area. But the missing boat could not be located in the computed area.

At last, on the evening of 1 April 2005, MV Gem of Ennore, an Indian Flag vessel, reported sighting the *Lak Mali* at a position approximately 345 NM north east of Chennai. MRCC Chennai requested the ship to tow the fishing boat to Chennai harbour but MV Gem was unable to do so, being fully loaded. But at the MRCC's request, the ship's crew provided a hand-held portable VHF set with a spare battery to *Lak Mali*. CGS *Priyadarshini* from Vizag then sailed to the area, established communication with FV *Lak Mali*, sighted the boat, rendered logistics and first aid and towed it to Chennai harbour. The *Lak Mali* had drifted 312 nautical miles, an average drift of 1.87 NM/hr.

If the Coast Guard were to compute costs for this SAR operation, the

total cost for the operations of three ships – the CG Dornier (five sorties in 19 hours and 10 minutes), the *Priyadarshini* (three ship days), the *Chennamma* and the *Ranijindan* (five ship days) – would have worked out to Rs 7.4 million. (This figure excludes the cost for escorting the boat during its disability.)

The vessel was adrift and disabled. It had communication sets onboard, but these were crippled by power failure. Had the vessel been equipped with an EPIRB or SART, it could have been saved by CG aircraft on their first sortie.

Indian Fishing Vessel MDS-967

On August 9, 2004, MRCC was informed about a missing fishing boat, MDS-967. It had left Chennai with six crew on 26 July, was due to return on 6 August, but there was no sign of it. A search sortie was immediately undertaken, and two ships were alerted to look for the missing boat and render assistance. Three Safety Net messages covering the entire Bay of Bengal were transmitted by MRCC, Chennai in view of a possible drift of the boat towards Bangladesh or Myanmar.

On a report that the missing boat's crew had contacted the owners by cell phone off Kakinada, searches were diverted to that area. District Commanders in the region were requested to enhance surveillance. It was only on 30 Aug 2004 that the vessel's owners in Chennai reported drifting of the vessel to Teknaf in Cox's Bazar district, Bangladesh. MRCC contacted the authorities in Bangladesh and confirmed their safety.

The drifting of this boat to Bangladesh could have been avoided if it had some communication equipment, and either the owners or SAR authorities had been informed in time.

Initiatives by Indian Coast Guard

MRCCs are capable of receiving alerts through the COSPAS-SARSAT system from EPIRBs operating on 406 Mhz. These

EPIRBs cost around Rs 50 000 in the international market; our fishermen can't afford them.

The Coast Guard has requested the Indian Space Research Organisation to develop a low-cost EPIRB costing below Rs 10 000 to enable our fishermen to relay any distress situation. They could also press one of four simple buttons to indicate distress. The EPIRB transmits the alert through the INSAT satellite system to a reception centre at the MRCCs. The SAR can then be initiated without any loss of time.

The low-cost EPIRBs are scheduled to complete extensive trials in 2006. They will then be ready for mass production. State governments will be requested to subsidize the costs and issue the transmitters to fishermen. Another Coast Guard initiative relates to training and community interaction programmes to educate fishermen on sea safety measures.

A toll-free four digit maritime SAR emergency telephone number 155204/(1718) has been activated all along the Indian coastline to warn about emergency at sea. These telephone numbers have been installed at all rescue co-ordinating centres, and are manned round the clock. Extensive publicity is given to fishermen to promptly report incidents of missing fishermen.

Fishing community initiatives

Innovations in technology are such that we can predict cyclones well in time. Certain fishing hamlets in Tamil Nadu are said to have monitored the movement of cyclones and issued warnings on their own. These warnings were heeded and fishermen stayed ashore. Similar efforts should be encouraged in all of India's coastal fishing villages. The local administration should be pro-active in monitoring the weather and preventing fishermen from venturing out to sea during rough weather.

Time is of the essence in SAR. The SAR authority has the best chance of locating a person or vessel in distress if it has been notified the relevant details – about the vessel, the persons missing, the area of vessel operation – by the quickest means possible.

Recommendations:

The following mandatory safety devices and measures are recommended for immediate implementation onboard all fishing vessels to optimize and economise SAR efforts and operations.

a) Traditional craft (vallams & catamarans).

- Life jackets and life floats for all crew.
- Hand-held VHF Sets/ GPS.
- Restricted area of operation, within the VHF range of a Coast VHF Station.
- Regular training on sea safety measures.

b) Mechanised fishing boats <20 m.

- Life jackets for all crew.
- Life floats onboard the vessel.
- 25 watt VHF set with Channel 16 and other frequencies.
- Hand-held GPS equipment.
- Low cost 406 Mhz EPIRB float free manually operated with GPS integrated.
- One SART (Search and Rescue Transponder).
- Restricted area of operation.
- Regular mandatory training on sea safety measures.
- Mandatory daily report to SAR agencies/state authorities.

c) Shore infrastructure

- VHF towers to be set up along the coast by state authorities at least 80 kms apart.
- Dissemination of weather bulletins and information on potential fishing zones.
- Recall of vessels during cyclones/storm surge.
- Encourage cellular operators to locate towers along the coast.

The International Labour Organization and the Safety and Health of Fishers

Ingrid Christensen, Sr. Specialist on Occupational Safety and Health, ILO Sub-regional Office for South Asia, New Delhi and **Brandt Wagner**, Sr. Maritime and Fisheries Specialist, Sectoral Activities, ILO, Geneva

This article, based on a paper presented at IFISH-3, describes the work of the ILO on improving occupational safety and health, with particular reference to fishers. It also discusses efforts to develop a Convention and recommendations on work in the fishing sector.

The primary goal of the ILO is to promote opportunities for men and women to obtain decent and productive work, in conditions of freedom, equity, security and human dignity (“Decent Work for All”). The ILO is seeking to achieve this goal in all sectors, including the fishing sector.

To take fisheries, an estimated 36 million people were engaged in capture fishing and aquaculture production worldwide in 1998, comprising 15 million full-time, 13 million part-time and 8 million occasional¹ workers. In 2000, an estimated 27 million persons were working solely in capture fishing worldwide.^{2,3}

Asia accounts for an estimated 82 percent of fishers. At present, the small-scale fisheries sector accounts for roughly 45 per cent of the total catch.

Safety and Health in the Fishing Sector

The ILO’s Tripartite Meeting on Safety and Health in the Fishing Industry (December 1999) concluded that:

“Fishing is a hazardous occupation when compared to other occupations. Sustained efforts are needed at all levels and by all parties

The International Labour Organization (ILO) was founded in 1919 to bring governments, employer and worker organizations together for united action in the cause of social justice and better working conditions everywhere. In 1946 it became the first specialized agency of the UN system. It is unique among such agencies in that it has a tripartite structure: not only government representatives but also employer and worker representatives take part and vote at its Conference and other meetings. The ILO has 178 member States.



The International Labour Conference meets in June every year to discuss the programme, the budget, various reports on the application of ILO standards, and adoption of new or revised standards. The Governing Body, which meets two or three times each year, determines the agenda of the Conference and directs the work of the International Labour Office. The International Labour Office is the permanent secretariat of the Organization, with headquarters in Geneva and offices in more than 40 countries. The Director-General is Mr Juan Somavia.

to improve the safety and health of fishermen. The issue of safety and health must be considered broadly in order to identify and mitigate — if not eliminate — the underlying causes of accidents and diseases in this sector. Consideration also needs to be given to the great diversity within the industry based on the size of the vessel, type of fishing and gear, area of operation, etc.”

Figures on accidents and injuries — collected as part of the preparation for a consolidated ILO Convention on Work in the Fishing Sector and its accompanying Recommendation (see below) support this conclusion.

In Japan in 2000, of the 88 fatal injuries for all workers covered by the Mariners’ Law, 55 concerned fishers. Oxford University researchers say fishers have by far the most dangerous jobs in the United Kingdom. In the United

States, the fatality rate in the fishing industry was 160 deaths per 100 000 workers in 1995; it rose to 179 per 100 000 in 1998. In 1996 this rate was 16 times higher for fishers than for other occupations such as fire-fighters, police and detectives and

¹ FAO: *The state of the world fisheries and aquaculture* (Rome, 2000), p. 3.

² Those engaged in fishing from which they gain less than one-third of their income or spend less than one-third of their work time.

³ The ILO has made this estimate using FAO data. The ILO publishes a number of relevant series on workers in its *Yearbook of Labour Statistics*. These relate to total employment (paid employment plus self-employment) and persons in paid employment. All these series are classified according to economic activity, using either the International Standard Industrial Classification of all Economic Activities (ISIC) Revision 2 or ISIC Revision 3. Where ISIC Rev.3 is used, separate data may be available for fishing; otherwise, fishing is incorporated in Major Division 1 of ISIC Rev.2 along with agriculture, hunting and forestry. The data on total employment are also classified by occupation, according to the International Standard Classification of Occupations (ISCO) — either the 1968 revision (ISCO-68) or the 1988 revision (ISCO-88), at the major group level. Consequently, fishermen are not identified separately.



eight times higher than the rate for persons operating motor vehicles for a living. In April 2001 the European Parliament adopted a resolution concerning safety and causes of accidents in fisheries which set out not only the high death and injury rate in this sector but also called for specific actions, including regulatory action, to improve this record at both the European and the international level⁴. For comparison, the average accident fatality rate per 100 000 workers for all occupations is about 12.5.

Additionally, the fishing industry entails other potential risk factors such as strenuous work, working in awkward positions and lifting of heavy loads, exposure to noise from engines and whole-body vibrations, exposure to difficult climatic conditions, long working hours and night shifts, disruption of social and family life and other psycho-social factors.

In many countries, the vast majority of people directly involved in seagoing activities are men. Apart from the physically demanding work, other factors too make it more difficult for women to enter this industry. But many of the pre-harvesting and post-harvesting activities are carried out by women.

Improving Safety and Health Conditions in Fisheries

Improving the safety and health conditions in the fishing sector requires interventions at

international, national and local (workplace) levels. Government, employers, workers and their organizations – all of them must take active part in the process. At the international level, the ILO has organised Conventions and come out with recommendations, policy and strategy development, research and analysis, guidelines and other information materials. These activities include:

ILO Standards for the Fishing Sector

In its 87 years, the ILO has adopted five Conventions⁵ and two Recommendations specifically concerned with conditions of work of fishers. These include:

- 1920: A recommendation on limiting the hours of work of all workers employed in the fishing industry.
- 1959: Conventions concerning minimum age, medical examination and articles of agreement of fishers.
- 1966: Conventions concerning fishers' competency certificates and fishing vessel crew accommodation, as well as a Recommendation concerning the vocational training of fishers.

The December 1999 ILO Tripartite Meeting made recommendations, on the basis of which the 2004 session of the International Labour Conference (ILC) was to discuss a comprehensive standard on work in the fishing sector. It was agreed that

this standard should revise the seven existing ILO standards (five Conventions and two Recommendations), thus reflecting changes in the sector over the past 40 years; it was also agreed that the standard should reach or cover a greater proportion of the world's fishers, particularly those working on smaller vessels.

ILC 2004 discussed the proposal for a Convention and a Recommendation respectively. Another Tripartite Meeting of Experts on the Fishing Sector was convened in December 2004, and revised proposals for a Convention on Work in the Fishing Sector were tabled for ILC 2005.

The proposed Convention consisted of eight parts. (They dealt with definitions and scope; general principles; minimum requirements for work on board fishing vessels; conditions of service; accommodation and food; health protection, medical care and social security; compliance and enforcement; and amendment of annexes.) It also contained three annexes, which are integral part of the Convention and provide for: equivalence in units of measurement; fisher's work agreement; and fishing vessel accommodation.

The proposed Convention also dealt with Occupational Safety and Health (OSH) and accident prevention. It carried provisions concerning prevention of occupational accident and diseases, risk evaluation and management, training, young fishers below 18, reporting and investigation of accidents and the establishment of joint committees (or other appropriate bodies) on OSH. For

⁴ From Report submitted to ILC 2004

⁵ A Convention is subject to ratification. Once a State has ratified a Convention, and the Convention has entered into force, the State is obliged to bring its domestic law and practice in conformity with the Convention provisions. A Recommendation is not open to ratification. Instead, it provides guidelines, including suggestions of a technical nature, to assist States in developing their national policy and practice with regard to the particular labour matter.

larger boats, the Convention had more elaborate provisions.

However, as many of the participants of IFISH-3 may know, the proposed Convention and Recommendation were not adopted. There was doubt on whether these instruments would effectively address the situation of fishers working on small fishing vessels in developing countries. Another difficult matter was how to determine what standards should apply to small fishing vessels and what standards should apply to large fishing vessels – and where to draw the line between these categories.

In November 2005, the Governing Body decided that the proposed standards should be tabled at ILC 2007 after renewed consultation with member States. The ILO Secretariat said it would encourage IFISH-3 participants to take part in any national-level consultations and work out changes to improve the proposed Convention and Recommendation.

ILO and Occupational Safety and Health: The ILO has also had a long history concerning improvement of safety and health at workplaces across various economic sectors. This includes the adoption of about 70 Conventions and Recommendations related to OSH.

An example of such an instrument is the Occupational Safety and Health Convention, 1981 (No. 155), which prescribes the adoption of a coherent national policy on OSH and the working environment. It also outlines the general responsibilities and duties of governments, employers and workers. But it provides that member States may exclude fishing from its application. Some 40 member-States have ratified this Convention. The Convention on Occupational Health Services, 1985 (No. 161) is another one with a broad application.

The ILO has also adopted standards concerning OSH in specific sectors such as agriculture, mining,

shipping and dock work. The Prevention of Accidents (Seafarers) Convention, 1970 (No. 134), sets out requirements for “seafarers”. In many member States, the protection afforded by this Convention applies to fishers — or in some cases to fishers working on large fishing vessels. But in some other countries these laws apply only to “seafarers” working on board merchant marine vessels.

Likewise, laws relating to OSH-related issues such as medical examination, medical care at sea and working hours are aimed at seafarers. In some countries these laws extend to fishers, in some others only to fishers working on deep-sea vessels, in some countries they do not apply to fishers.

To reduce the estimated 2 million (+) deaths that occur annually because of occupational accidents and occupational diseases, a new ILO Global Strategy on OSH was adopted at the 91st Session of the ILC in 2003. This strategy has two pillars: (i) creation and maintenance of a national preventive safety and health culture; and (ii) introduction of a systems approach to OSH management. At the national level, the strategy envisages national OSH programmes, while at the enterprise level, ***the ILO Guidelines on Occupational Safety and Health Management Systems (ILO-OSH***

2001), provide guidance for the strategy.

Apart from OSH within the proposed Fishing Convention, OSH was also tabled as an item by itself on the agenda of ILC 2005, during which a proposed Promotional Framework Instrument was to be discussed. This Framework Instrument, suggested by the Committee to take the form of a Convention and a Recommendation, lays out the basic requirements of an OSH national policy, an OSH national system and an OSH national programme.

Joint FAO/ILO/IMO work concerning the safety and health of fishers

To support the implementation at country level of the principles enshrined in the more formal standards, Conventions and Recommendations, the ILO has adopted a number of “Codes of Practice” concerning OSH in specific economic sectors. In the fishing sector, such Codes and other non-binding guidance have been jointly prepared with the FAO and the IMO. The three organizations have recently completed revising four such publications.

a) The FAO/ILO/IMO Document for Guidance on Training and Certification of Fishing Vessel Personnel is the recently revised



version of a document originally prepared by the FAO, ILO and IMO in the 1980s. It provides guidance for those developing, establishing or reviewing national training schemes, as well as certification programmes for fishing vessel personnel.

b) The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels (Part A, safety and health practice for skippers and crews) addresses vessel safety; safety in machinery spaces and of mechanical equipment; fire precautions and fire-fighting; safety in fishing operations and fish handling; life-saving appliances and emergencies; abandoning the vessel; survival and rescue; safety of navigation and radio communications; shipboard facilities for crew members; health and medical care; survival from sudden, unexpected immersion in cold water; risk assessment; fatigue; and many other issues. It is divided into a general section concerning all fishing vessels, a section concerning un-decked vessels and decked vessels of less than 12 metres in length, and a section concerning decked vessels of 12 metres in length and over.

c) The FAO/ILO/IMO Code of Safety for Fishermen and Fishing Vessels (Part B, Safety and health requirements for the construction and equipment of fishing vessels) addresses a wide range of issues concerning the safe construction and equipping of vessels, as well as such issues as stability and associated seaworthiness. It takes into account the Protocol of 1993 to the Torremolinos International Convention for the Safety of Fishing Vessels, 1977 and other relevant IMO work.

d) The FAO/ILO/IMO Voluntary Guidelines for the Design, Construction and Equipment of Small Fishing Vessels is similar to the Code, Part B, but it is aimed at vessels that are 12 meters in length and above, but less than 24 meters in length.

The *re-establishment of livelihoods in tsunami-affected areas*, both for



A Sri Lankan fisher

fishing and non-fishing communities, is another example of cooperation between FAO and ILO on specific issues, in this case at the country level.

Interventions at National and Workplace Levels

Implementation of the principles adopted *vis-a-vis* the standards at the national level and the workplace level, require the active participation of governments, organizations of employers and workers, and collaboration between employers and workers.

At the national level, governments in consultation with employers' and workers' organizations should establish the national framework for improvement of OSH in the fishing sector. Such a framework concerns many things: competent authorities, national policy, legislation and its enforcement, mechanism for cooperation and coordination among the stakeholders. Other instruments include awareness-raising and promotion, data collection and analyses, research as well as training and education.

In this context, employers' and workers' organizations as well as research institutions, NGOs, CBOs (community-based organizations), and projects such as the Bay of Bengal Programme can help transform national-level interventions into applicable

interventions at the workplace level. Moreover, they should participate in discussions at the national level on how to advance OSH in a country.

For enterprise/ workplace interventions, **ILO-OSH 2001** (ILO Guidelines for Occupational Safety and Health Management Systems) provides a systematic management approach to safety and health for industries and sectors in general. It provides for larger workplaces to prepare a policy, establish an organization to implement the policy, plan and implement improvements to the working environment, monitor and evaluate the measures and finally assess the need for adjusting the management system. For small and micro-sized workplaces, including those within the fishing sector, less formal instruments would usually be more appropriate. For both approaches (small and large workplaces), the involvement of workers is a key factor.

Prevention Pays

Preventive measures toward safety and health are often perceived as being expensive. The ILO has since 1980 sought to promote safety, health, working conditions and productivity (or other management goals) at small and medium-sized enterprises.

The concept encourages the use of low-cost improvements wherever possible and of solutions/ methods/ techniques already implemented in a country or region. Training modules have been developed for specific sectors such as garments, agriculture and construction, and have been used in a number of countries of Asia, Africa, America and Europe. As a result, more than 100 000 improvements have been recorded in Vietnam in the agricultural sector. Fishing could be the next sector for which to adapt the general concept.

More information:

<http://www.ilo.org/public/english/protection/safework/>

<http://www.ilo.org/public/english/dialogue/sector/sectors/mariti/fishing-iloact.htm>

Strengthening Fisheries HRD in India - The Dynamic Role of the CIFE



India has vast and diverse marine and inland fisheries resources. In view of the need for trained and qualified manpower in this sector, the Central Institute of Fisheries Education (CIFE) was established on 6 June 1961 in Bombay (now Mumbai) as a Government of India institution with FAO/ UNDP assistance. Its activities started with a two-year post-graduate Diploma in Fisheries Science to fisheries personnel, mainly from departments of fisheries of the States/ Union Territories.

The Inland Fisheries Training Centre, started in 1947 by the Government of India, was taken over by CIFE in October 1967. The erstwhile Fisheries Extension Centers of the Government also became CIFE sub-centers for Inland Fisheries Operatives Training at Agra and Hyderabad. These centers were subsequently shifted to Lucknow (Uttar Pradesh) and Kakinada (Andhra Pradesh) respectively. The Institute also acquired the much needed aqua-farm infrastructure, with the transfer of the Brackishwater Fish Farm at Kakinada (August 1968) and the Freshwater Fish Farm at Balabhadrapuram (April 1974) from the Government of Andhra Pradesh.

CIFE became a part of the Indian Council of Agricultural Research (ICAR) in April 1979. The 36.87 meter training-cum-research vessel MFV Saraswati, acquired with NORAD support in December 1982, strengthened the CIFE's programmes in marine fisheries and oceanography. During this period, the training facility in freshwater aquaculture also got a boost with the acquisition of a 100-acre fish farm at Powerkheda from the



Dr Dilip Kumar, Director and Vice-Chancellor of CIFE, joined the Institute in September 2005. He believes in participatory approaches to fisheries development and management. Before this assignment, he helped set up the



Network of Aquafarmers Associations in the Asia-Pacific region and helped develop an Asia Regional Aquatic Animal Health Certification and Quarantine System. Dr Kumar has developed and demonstrated a highly acclaimed model for fisheries co-management that ensures community participation in the management of coastal fisheries resources in Bangladesh.

The aquaculture extension approach popularly known as "Trickle Down System of Aquaculture Extension" which was conceptualized by him as an FAO expert, is now widely practised in Bangladesh and other Asian countries. The project won the prestigious Edouard Saouma Award for the year 1997. He spent more than 15 years with UN Agencies such as FAO, UNDP, NACA and assignments with other International Agencies such as IFAD and UNOPS; through them Dr Kumar played a pivotal role in fisheries development in several SAARC, ASEAN and East African countries including Bangladesh, Bhutan, Sri Lanka, Nepal, Thailand, Vietnam, Zambia, Zimbabwe, Kenya, etc. Dr Kumar's vision is to make CIFE a vibrant institution of international calibre. Dr Kumar can be contacted at dk.dilipkumar@gmail.com.

Box 1: Specializations offered for M.F. Sc and Ph. D courses

Fisheries Resource Management	M.F. Sc & Ph.D
Inland Aquaculture	M.F. Sc
Mariculture	M.F. Sc
Freshwater Aquaculture	M.F. Sc
Post-Harvest Technology	M.F. Sc & Ph.D
Fish Genetics	Ph.D
Fish Biotechnology	Ph.D
Fish Genetics & Biotechnology	M.F. Sc
Fish Nutrition & Biochemistry	M.F. Sc & Ph.D
Fish Pathology & Microbiology	M.F. Sc & Ph.D
Fish Business Management	M.F. Sc & Ph.D

Government of Madhya Pradesh. During 1984, an M.Sc course in fisheries management affiliated to the University of Bombay was started.

CIFE was accorded Deemed University status in March 1989 in recognition of its pioneering role in fisheries education. Consequently, masters and doctoral programmes (till then affiliated to the University of Bombay) were brought under the academic purview of CIFE. The Master of Fisheries Science (M.F.Sc) and Ph.D courses in mariculture affiliated to the Cochin University of Science and Technology were also brought under the CIFE banner. The Institute started two new M.F.Sc programmes

in Freshwater Aquaculture and Post-harvest Technology at Central Institute of Fisheries Aquaculture, Bhubaneswar, and Central Institute of Fisheries Technology, Kochi, respectively.

Achievements

CIFE offers masters and doctoral programmes in different areas of

fisheries sciences (Box 1) to provide qualified manpower to the sector. It offers vocational and refresher courses to fisheries development officials and aspiring entrepreneurs; it also provides consultancies to government organisations, NGOs and private companies.

The faculty is selected through an all-India examination, and students through all-India entrance tests. The courses are residential and ensure maximum student attention. Every student gets a scholarship. Only five students are selected for each branch of specialization. A well-equipped library, hostel, playground and gymnasium provide first-rate facilities.

Since inception a total of 4 350 students including over 100 foreign students have completed their studies. Ph.D degrees were awarded to 72, M.F.Sc to 278, Post-Graduate Diplomas to 1 043 and 2 857 got Certificates.

A placement cell facilitates gainful employment for those who pass out of the Institute. The Dr Hiralal Choudhary Foundation Award is a gold medal for students securing the highest OGPA in different streams of M.F.Sc and Ph.D programmes every year. This foundation has also instituted annual awards for the best teacher, a young scientist, the best technical staff, the best supporting staff and the best extension worker for technology transfer.

The Institute also arranges annual lectures by an eminent personality in fisheries every year. Through the TATA Endowment Trust, CIFE arranges further training for the two best students of the Institute, one from M.F.Sc and one from Ph. D stream, in India and abroad. The Dilip R Jalihal Award is given to the best M.F.Sc thesis every year.

Staff and student researchers of CIFE take up a number of research programmes (Box 2). An important research area relates to aquaculture in saline soils. Recently, CIFE scientists have evolved a mechanism to breed prawn in such saline conditions. This will help boost the blue revolution in the heartland of India's green revolution. To improve the productivity of reservoirs, the institute has piloted cage culture trials of commercially important species. It has also conducted path-breaking research in genetics and biotechnology, in the development of value-added products, in database development and resource management.

Since its inception, the Institute has been serving the community in many ways. CIFE has facilitated a 'blue revolution' in Andhra Pradesh, demonstrated cage culture technology in Himachal Pradesh, Madhya Pradesh, Chattisgarh and Maharashtra. It is striving to set up

Box 2: Significant Research Highlights

- Breeding of *Macrobrachium rosenbergii* using ground saline water.
- Cage culture trials of commercially important fishes in open waters.
- Development of value-added products from low-cost fish by modern and improved conventional methods.
- Larval rearing of giant freshwater prawn *Macrobrachium rosenbergii* in artificial seawater for establishment of backyard/ small-scale hatcheries in inland states.
- Use of ozone in shrimp and prawn hatcheries to treat water and control larval diseases in hatcheries.
- Development of carp hatcheries for breeding under controlled conditions.
- Culture of marine fin and shellfish in inland ground saline water.
- Culture of live food organisms for aqua hatcheries.
- DNA fingerprinting and RADP profiles of selected fish species.
- Hatchery for breeding of *Clarias batrachus*.
- Database development for marine fisheries of Maharashtra.
- EIA studies of shrimp farming in the coastal districts of Andhra Pradesh and Tamil Nadu.
- Field trials on standardization of indigenous hormone, ovatide, for breeding of Indian and exotic carps.



Students at work in the laboratory

Box 3: Thrust Areas

- Utilization of salt-affected inland areas through aquaculture.
- Genotype environment interaction studies of *Macrobrachium rosenbergii* for economically important traits.
- Non-food organisms in aquaculture.
- Sustainable fisheries development through co-management.
- Policy framework for Indian fisheries and aquaculture.
- Quality enhancement in fish.

freshwater prawn hatcheries using artificial sea water in the north-eastern states of Tripura, Mizoram and Manipur. It is collaborating with fisheries departments of many inland and coastal states on holistic development of fisheries in these states. The Institute has experimented with developmental models to improve the livelihoods of fisheries communities.

The Institute has taken up many collaborative ventures with private, government, co-operative and international institutions and NGOs. Examples: private companies like Godrej, Hemmo Pharma, Biostadt India Ltd, public sector institutions such as National Institute of Oceanography, Goa, National Environmental Engineering Research Institute, Nagpur; Central Drug Research Institute, Lucknow and Indian Space Research Organisation, Ahmedabad. It interacts actively with international agencies. In collaboration with Australia, it is developing

aquaculture in degraded inland areas of India and Australia. Experts from reputed institutions sit in the CIFE's Board of Management, Academic Council, Research Advisory Council, and Extension Council. The Institute's course curricula are revised from time to time to meet current challenges.

The Institute has been playing pivotal role in fisheries education, nutritional security and policy formulation. CIFE alumni serve as torchbearers of institutions in India and abroad. In the field, the Institute has designed development models for north-eastern states, for fisherwomen and for poor Adivasi (tribal) villages. In the area of research, the CIFE has developed several technologies and at the policy level, the Institute is helping in the formulation of a national fisheries policy.

The Institute has been playing a key role in enhancing capabilities of fisheries departments in Afro-Asian

countries by providing slots in its post-graduate programmes for its personnel. The Institute can also play a major role in enhancing Fisheries Education and Extension in the Bay of Bengal region.

The Future

The CIFE has identified thrust areas for the future (Box 3). Fishing grounds are in open access and common property. The Institute recognises the urgent need to address co-management issues in fisheries.

The fisheries sector demands sustainable aquaculture systems, responsible fisheries, post-harvest management and research to augment productivity, efficiency, equity, sustainability and trade. CIFE endeavours to empower fishers and fisheries professionals towards these goals. It also aspires to be a global leader in fisheries education. In a globalizing world, CIFE has to provide education programmes that make students both nationally useful and globally aware. Curricula must therefore be developed that strengthen understanding of global phenomena and global trends. The latest teaching and pedagogical aids are required to meet these challenges. The process of entrepreneurship development must be stimulated. More details on the Institute can be seen at <http://www.icar.org.in/cife/intro.htm>.

Model of the new campus of CIFE



A Quarter Century of Bay of Bengal News

by S R Madhu

Human beings desire longevity, so do journals! For any development journal, 25 years is a rare landmark. *Bay of Bengal News* (BBN) has just crossed it, and this issue — the 80th issue of BBN — celebrates the occasion. However, it is not an exercise in either narcissism or nostalgia. It is a factual and anecdotal review aimed at people concerned with development and communication. It is also significant for the BOBP's archives. The review is necessarily both selective and subjective.

How does the present BBN (June 2006) differ from that of the first issue (January 1981)? Black-and-white photographs have given way to colour, litho-offset paper to art paper. The manual design of yesteryear has given way to computerized design, with the power of Photoshop, Illustrator and Corel Draw reinforcing artistic creativity.

Why was BBN popular from the start? Because it applied to fisheries development the techniques of modern magazine journalism — imaginative design, professional action photographs, catchy headings, concise factual and anecdotal writing free of jargon, first-rate printing.

When BBN was born in January 1981, the few fisheries magazines in the region were mundane activity catalogues with little descriptive or analytical text. The mug shots or workshop snaps they printed generated little visual excitement. BBN therefore stood out with its creative design, flamboyant visuals and racy text.

What about the content of BBN? It has over a quarter century reflected

the Programme's changing thrust and orientation. The first phase of the BOBP (1979-1986) focused on technology, the second phase (1987-1994) on communities and extension of technologies, the third phase (1994-2000, extended till March 2003) on management, the present Inter-Governmental Organisation (from April 2003) on sustainable development and management of coastal fisheries.

Dr Y S Yadava, director of the BOBP-IGO, recalls that BBN served as a medium of continuity between BOBP and the IGO. When the process of transforming the BOBP began, "I was advised to keep publishing the BBN."

Bay of Bengal News is only one of the information tools used by BOBP over the years. The others: technical reports, calendars, extension manuals, brochures, audio-visuals, video films, posters, exhibitions, CD-ROMs, comic books, CDs, the library. But BBN has been the oldest tool, it has had the widest reach, and the best impact.

BOBP's first director Lars Engvall, who published the first 52 issues of BBN, said that fisheries officials absorbed BOBP's technical work quicker from the short, simple articles of *Bay of Bengal News* than from detailed technical reports. To the surprise of many, BBN often published frank critiques of its own work, and highlighted problems and failures. Reason: failures are more useful as lessons and guidelines for future development than successes.

This article provides a few highlights of BBN coverage as well as of BOBP work during the past quarter century. BBN and BOBP are inter-twined!

The New York Times on BOBP

Early in its life (on January 22, 1981), BOBP made a little splash in the world's greatest newspaper, *The New York Times*. (See the second issue of BBN, May 1981). *New York Times* correspondent K Kasturi Rangan was charmed by kattumarams and our beachcraft development work. His story headed "Innovative fishermen in India trying motorboats" inspired many phone calls and letters to the UN headquarters in New York.



Bewildered UN staff who hadn't heard of this project in faraway Madras, turned to the FAO headquarters in Rome for enlightenment.

Photo exhibitions

One of the first major events in BOBP was a photo exhibition on small-scale fisheries held in 1981. The four-day event was inaugurated on October 16, World Food Day. It was also held in Colombo later – on December 5-7, 1981. About a hundred photographs of small-scale fishing communities and of BOBP work were on view in specially designed stands. The BBN of December 1981 published a sampling of the exhibition pictures in a four-page feature. Stunning!

Why the photo exhibition? To put small-scale fisheries in the limelight, to stimulate interest in our own work, to obtain attractive photographs for BBN, and build a photo collection. The exhibition was inaugurated in Chennai by Tamil Nadu's then Finance Minister V R Nedunchezian, and in Colombo by Fisheries Minister Festus Perera.

Photographs for the exhibition were shot by Harry Miller, photo editor of the *Indian Express*, Chennai, who travelled to fishing villages of India, Bangladesh and Sri Lanka. In Bangladesh, Miller spent some time shooting a mechanic at work atop a boat at the Danida boatyard. Staff of DANIDA in Copenhagen were entranced by this picture (it appeared in the May 1981 BBN) and sent copies of it far and wide. Another poignant picture was of two Cox's Bazar fishermen, heads bent, hands busy, mending nets in the soft glow of twilight. A third photo winner: A smiling boy held aloft a fish like a trophy for Miller, and he eagerly clicked. What resulted was the signature photograph of the exhibition, reproduced by several newspapers and magazines, also in the BBN of May 1981.

In Kakinada, Miller crouched at the beach with his wide-angle lens as two slender women carrying a fish basket walked from the beach to the



shore. Just before he clicked, a young man ran in between, and Miller exploded in wrath – as any photographer would. But the two women offered to recreate their walk for Miller's benefit despite being late for an auction. Result: a beautiful shot. It generated as much attention at the exhibition as it did in BBN's fourth issue (December 1981).

We built on the photo exhibition collection fairly systematically in later years. Our library gradually came to house thousands of slides, plus prints in color and b-w. These were catalogued and indexed. They are now being digitized.

A decade later, in July-August 1991 – the BOBP held an exhibition of photographs and drawings titled "Fisherfolk of the Bay" in Chennai in co-operation with the Alliance Francaise. A *therukoothu* (street play) performance by a Pulicat troupe was a highlight of the inaugural day. The exhibition, featured in the September 1991 BBN, again generated very good press coverage.

To get back to chronology. The June 1981 issue of BBN sparked an ebullient letter from Mr Kenneth Lucas, then FAO's Assistant Director-General of Fisheries. He asked for details of the staffing

pattern, the methodology and the costs of BBN. He sent FAO fisheries projects worldwide a circular citing BBN, asking them to consider publishing newsletters to disseminate their work. Today, several FAO projects put out their own newsletters. *Bay of Bengal News* was definitely a trend-setter.

Fishing technology

During its initial years, BOBP carried out painstaking studies on making the traditional kattumaram more profitable. The studies dealt with chemical impregnation to strengthen kattumaram logs, and sourcing the Andaman Islands for more durable wooden logs. But the conclusion, in the words of director Lars Engvall, was that the kattumaram was a "near-perfect craft", thanks to centuries of evolution, and could not be improved in practically useful ways.

A Daniel of the Tamil Nadu Fisheries Department wrote a first-rate article on kattumarams (September 1981). Kattumaram fishermen were profiled in a few articles.

Fishing craft and gear technology fairly dominated the first few years of both BOBP and BBN. Extensive work was done on beachcraft. The work entailed research, design, development, building and testing of 14 prototypes; plus experiments on improving engines, sails, hulls and beach-hauling devices. Naval architect Oyvind Gulbrandsen of Norway spearheaded our beachcraft effort as consultant.

The pages of BBN reflected all this ferment. Some significant articles on beachcraft: "Better beachboats for India's east coast" (January 1981), "Beach-hauling devices" by Arild Overa (March 1983), "Beachcraft development: looking ahead" by Oyvind Gulbrandsen (March 1986); "BOBP beachcraft: how is the fishing performance?" by R Ravikumar (September 1987).

BBN published many creative and innovative sketches and diagrams on beachcraft. These contained either visual overviews or technical data

with a clarity and detail that no photograph could provide, and delighted Lars Engvall and the fishing technology staff. They were prepared by E Amalore, a qualified engineering draughtsman. Example: A sequence motion diagram for surf-crossing.

BOBP's fishing craft initiatives in Sri Lanka were described in many articles. Publisher Engvall said in his one-page "Letter from the Publisher" (December 1987), "An idea whose time has come" that multi-day trips for offshore fishing, advocated for a long time by many agencies including the BOBP, had suddenly arrived.

BOBP's extensive work on fishing gear was regularly reported in the BBN. Improvements were tried out with driftnets, trawls and set bagnets in Bangladesh; with fish aggregating devices in Sri Lanka. A major activity in India was the introduction of high-opening bottom trawls (HBT) in Tuticorin and Rameswaram. The rationale was that shrimp trawlers were usually busy only for four months a year. During the remaining months, shrimp trawlers could use HBT to catch fish (BBN, January & September 1981, March 1983).

The HBT turned out to be very successful – in fact so successful that they posed a threat to fishery resources.

In 1984, I accompanied a PTI (Press Trust of India) reporter and photographer Harry Miller to Rameswaram and Tuticorin for a demonstration of HBTs. The PTI reporter was swept off his feet by the success of HBTs. His sensational report about the HBT catches was flashed by newspapers from Kashmir to Kanyakumari, with front-page headlines about tons of fish being thrown into the sea. Owners of insulated vans from Bombay and Delhi air-dashed to Rameswaram and Tuticorin. BOBP became the best-known four-letter word in fisheries!

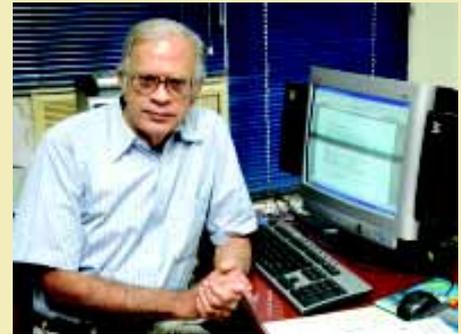
On a personal note: My toughest "hardship experience" in the BOBP

The first editor of *Bay of Bengal News*

Mr S R Madhu is the founding editor of *Bay of Bengal News*. He edited the first 42 issues of BBN, from January 1981 to June 1991. He has also been associated as consultant with the last 24 issues of BBN.

Mr Madhu joined the Bay of Bengal Programme as Information Officer in September 1979 after 15 years as writer and editor with the mass media in Bombay and New Delhi. In 1991, he was transferred to an FAO programme in Africa as Information Officer. He has been a consultant since return to India four years later.

Mr Madhu believes that development projects should communicate regularly with several types of audiences – rural populations, scientists, policy-makers, donors, the media. A regular pictorial newsletter is an excellent tool for such communication; it enables and strengthens project visibility and impact. He lauds the enlightened support extended to the newsletter by the three directors of BOBP – Mr Lars Engvall, Dr Kee-chai Chong and Dr Y S Yadava.



was a four-day assignment in Sonadia island in Bangladesh in 1984. We stayed in a BOBP hut – huts are the only form of housing in this all-fisherman island inhabited just five months a year. No tap water, no electricity, no toilets; you relieve yourself in the open. ("It's a great experience to work in Sonadia – you will never again take basic facilities for granted," said fishing technologist G Pajot.)

My assignment at Sonadia was to research and report for BBN on BOBP's experimental work on alternatives to the standard Behundi net. Some of the 3 000 Behundi fishermen in Sonadia were at BOBP's request trying out these alternatives – which, it was hoped, would either lower their costs or raise their incomes or both. (As it turned out, the results were not clear-cut and BOBP did not recommend the alternatives.)

My human interest profile of Sonadia island (March 1984 BBN) aroused much interest outside Bangladesh; my article on the sensitive subject of the behundi fishery and our experimental work was scanned by many eyes and went

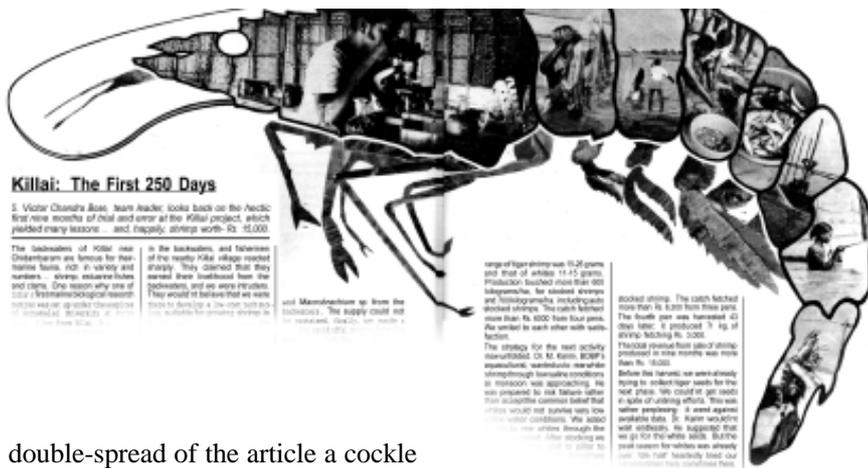
through a few drafts before publication in BBN.

Aquaculture

Photographers are fond of marine fish capture (the interaction of man, fish, water and sky is full of visual interest), but artists adore aquaculture. That's what one would infer from *Bay of Bengal News!* Some of BBN's most arresting layouts have been inspired by our aquaculture work.

The pen culture project in Killai, near Chidambaram, Tamil Nadu, led to a superbly designed BBN (July 1983). Particularly ingenious was the illustration for the article "Killai: the first 250 days". What we had were several workmanlike pictures. Artist Amalore drew a giant-sized shrimp, arranged eight pictures within it, and got it reduced by photo-copier. Result: hypnotic! Inventive verve couldn't be bettered.

For an article on cockle culture in Malaysia (June 1985 BBN), no attractive photographs were available. But creativity provided a solution. Artists Amalore and S Jayaraj made a few hundred photo copies of a single cockle and gave a



Killai: The First 250 Days

S. Victor Chandra Bose, team leader, looks back on the hectic first nine months of trial and error at the Killai project, which yielded many lessons – and rapidly altered worth- Rs. 15,000.

The introduction of Killai near Chandernagore was done for two reasons. One, to provide an alternative source of income for the people of the area, and two, to provide a source of protein for the people of the area.

in the introduction, and failure of the project. The supply could not be maintained. The supply could not be maintained. The supply could not be maintained.

range of tiger shrimp was 10-20 grams and that of white shrimp 15-25 grams. Production started from 1985. The catch reached more than Rs. 1000 from four acres. The catch reached more than Rs. 1000 from four acres.

Before the harvest, an experimentally designed pond was prepared for the next phase. The pond was prepared for the next phase. The pond was prepared for the next phase.

Blocked shrimp. The catch reached more than Rs. 1000 from four acres. The catch reached more than Rs. 1000 from four acres.

double-spread of the article a cockle embroidery!

Bay of Bengal News was featured in an FAO Rome publication in 1987. Writing about newsletters of development projects, Tony Loftas of the FAO's Information Division said that some newsletters could be produced by an editor alone; a sophisticated newsletter like *Bay of Bengal News* was possible only with professional design inputs. He illustrated his article with a double-spread from the March 1987 BBN that was headed "Extending the shrimp culture bonanza to India's rural poor".

BBN reported frequently on the biggest success of BOBP's first phase — the finfish cage culture project in Phang Nga bay, Thailand. (Cage culture of finfish began in six villages of Phang Nga province in 1979. It took off, and spread to 26 villages in all the six coastal provinces of southern Thailand).

The Phang Nga success story was described in his usual concise style by the late Vernon Pietersz, the Program's Development Adviser, in the cover story of BBN, September 1982. The project's socio-economic impact a decade after introduction of cage culture was analysed again by Pietersz (BBN, June 1990). He said that prosperity powered by fish cage culture was evident in the metalled roads, houses of concrete and asbestos that replaced nipa thatch, the cars and motorcycles, TVs and refrigerators.

Oyster culture was a success in Malaysia — because of several factors including the participatory

approach. (BBN, June 1991, March 1992, September 1992 and March 1993). Other culture projects (shrimp, seaweed, cockle) in India, Bangladesh, Sri Lanka, Malaysia and Thailand were less successful but yielded useful information and valuable lessons.

Aquaculturist Charles Angell did several interesting analyses for BBN of aquaculture projects and potential. Examples: March 1987 BBN (a workshop on shrimp culture on India's east coast), June 1987 (cover story on cockle management in Malaysia), March 1988 (shrimp feed formulation), December 1989 (seminar on seaweed production and utilization in the Bay of Bengal, held in Thailand), June 1990 (freshwater prawn fry marketing in Bangladesh).

Women's empowerment

Reports, articles and photo essays on women's issues are among BBN's most widely read stories. BOBP was the first agency in the region to systematically document the conditions of women in fisheries, and strategies to better their lot.

The setting up of a Fisherwomen's Extension Service in Tamil Nadu, a "link worker" training scheme in

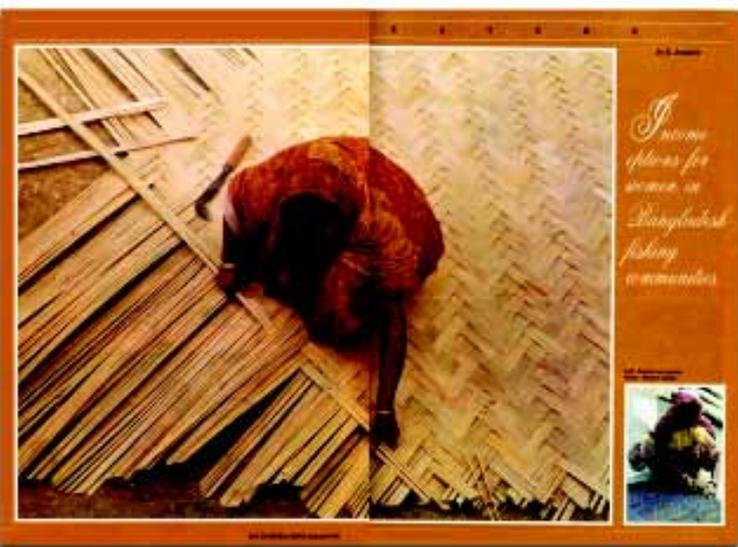
Chennai for women from 14 fishing villages, a regional workshop, socio-economic studies, training courses, women's self-help groups, credit schemes, income-generation activities – these were carried out in India, Bangladesh, Sri Lanka, and Thailand, and reported and investigated in *Bay of Bengal News*.

"Improving the participation of women in fisheries in their own development" – this was one of the main aims of BOBP's work with fisherwomen.

The September 1989 cover story in BBN "We want a fish market," captured the determination of the fisherwomen of Besant Nagar, Chennai, and the development process set in motion by BOBP to train the women, get them to approach the Corporation of Madras and help them realize their dream of a fish market.

The December 1987 BBN cover feature "We are hungry only for seaweed" presented photo reportage





on the women seaweed collectors of Chinnapalem village near Mandapam. S R Madhu wrote: “The energy, the skills and the stamina of Chinnapalem women, their bonhomie, their *joie de vivre* and smiling good humour in the face of adversity, are splendid to watch. Whoever said that our rural folk are passive and fatalistic, should meet the women of Chinnapalem. Salute them!”

This story led to inquiries from **India Today** magazine. Armed with our information and contacts, they sent a writer-photographer team to Mandapam. Result: another photo essay on the women seaweed collectors. An example of the multiplying impact of **BBN**.

A beautiful photo feature on income-options for women in Bangladesh fisheries appeared in the December 1996 **BBN**.

People's participation

BOBP has always sought, promoted and documented a participatory approach to development. The very popular December 1986 **BBN** had a cover package on people's participation (PEP), with an introduction by Rathin Roy.

The issue also carried three fact-packed articles on “fisherfolk power in south India”. They were about SIFFS, the South Indian Federation of Fishermen Societies, in Trivandrum; the Sangams of Kanyakumari; and a voluntary

organization in Quilon. The issue went out of stock very soon.

A major BOBP contribution to PEP knowledge and literature was through a special one-year SIDA-funded project in 1986-87. The learnings from several activities were discussed at a regional consultation in Bangalore in May 1987 that brought

together 45 participants from several countries. In the September 1987 **BBN**, Rathin Roy discussed the consultation and its findings.

Credit, non-formal education and other extension activities

In 1979, Orissa's Director of Fisheries requested BOBP to help train 15 newly recruited young extension officers. In 1981-82, BOBP implemented a one-year **in-service training programme**.

BOBP's training officer Uwe Tietze summarized the in-service programme in the June 1992 **BBN**. It was to consist of four modules – credit and financial assistance; community development; fishing craft and gear improvement. Each module would last three months and consist of a residential course, a pilot project and a final workshop.

The credit module paved the way for an outstanding **credit project for Orissa fisherfolk** – which is a favourite case-study at seminars worldwide on rural credit. In the March 1984 **BBN**, Uwe Tietze summarized the rationale and **modus operandi** of the project. He said credit for fisherfolk without subsidies would be viable provided it was preceded by the right preparation and documentation (including data on fisherfolk communities, fishing craft and gear, costs-and-earnings analyses of craft and gear); and the right degree of participation by multiple stakeholders.

The **non-formal education project for Orissa fisherfolk children** was also an offshoot of the training scheme. The December 1984 and December 1985 issues of **BBN** described the project in detail. In co-operation with various state agencies, UNICEF, and a full-time consultant (Ms Namita Ray), BOBP prepared a curriculum and some 120 booklets for fisherfolk children aged between 6 and 14. Some 20 non-formal centres were set up in four coastal districts of Orissa – Balasore, Cuttack, Puri, Ganjam.

Training Officer Uwe Tietze spent more time in Orissa than in Chennai, because of the work demanded by the in-service training, the credit and NFE projects. Following his work with BOBP, Tietze served the FAO in Rome for more than 20 years; He says the insights of his BOBP experience were invaluable throughout his career.

BOBP organized a first-of-its-kind **NFE project for adult fisherfolk in Tamil Nadu**. It was described in detail in the December 1983 and March 1985 issues of **BBN**. Materials were prepared for adult fisherfolk, for animators (teachers) and for trainers of animators in co-operation with NFE specialists. These were scrutinized by expert teams and reviewed at workshops.

A Trainers' Manual and an Animator's Guide published by BOBP sparked astonishing demand not just from all parts of India, but worldwide – demonstrating the need for these publications. In the March 1985 **BBN**, Valli Seshan and L S Saraswathi described the rationale and origin of the NFE project and the content of the many publications under the project.

The most heartening index of the project's success – it inspired an almost identical NFE package for rural populations in general by the Government of India, using the same consultants as the BOBP.

The March 1990 **Bay of Bengal News** carried an attractive photo



This montage of 80 Bay of Bengal News front pages captures the variety and diversity of themes, concepts and designs between January 1981 and June 2006.



25 Years of
 Bay of Bengal News
 80 issues... 80 covers

feature on an “integrated extension activities project” in 20-odd fishing villages of Ranong province, Thailand.

The project encompassed culture of oyster, grouper, mussel and shrimp; crab and squid traps; women’s activities; health care, non-formal education, credit. The BBN photo feature presented several culture activities, plus a very effective health care activity at Kor Sin Hai that was the essence of simplicity.

Sri Lankan fisherfolk have a special empathy for radio – their companion for news and entertainment out in the sea. The Sri Lankan Broadcasting Corporation has been airing special **radio programmes for fisherfolk** from January 1989. The September 1990 *Bay of Bengal News* reported on an evaluation of these programmes by British expert Michael Pickstock, formerly of the BBC. He returned later and helped organize a regional **radio training workshop** in Colombo; Pickstock and S Muthiah were among the resource persons. The September 1991 BBN enhanced the impact and reach of the training through detailed articles.

The radio training workshop generated considerable interest in the Maldives – a country of scattered islands, where radio has been a binding force for fisherfolk from 1978. In April-May 1993,

Pickstock was engaged to train 10 staff of the Voice of Maldives. “One small step for radio, one slightly bigger step for fisheries management,” said an article in the September 1993 BBN.

Bay of Bengal News helped popularize RRA (Rapid Rural Appraisal) as an extension tool in the region, through actual practice, manuals and reports, and BBN articles (a cover story in June 1990; RRA in post-harvest fisheries in the September 1993 BBN).

Fisheries resources

Information on fishery resources in the Bay of Bengal? The question aroused a cynical smile way back in 1979. “Unavailable, unreliable” was the terse comment by an expert. The picture is different now; BOBP has made the difference, with a stream of technical papers and reports, and some avidly read BBN articles. There have been wide-ranging resource reviews, plus insightful analyses on shrimp, hilsa, tuna, mackerel, demersal fish, reef fish, ornamental fish.

Our first intervention in fishery resources was a 1980 consultation in Chittagong on stock assessment in fisheries of the Bay of Bengal. B T Antony Raja was the consultant and a demanding one. His fact-packed technical paper “Current knowledge on the shelf resources in the Bay of

Bengal,” was reprinted twice; but demand for it continued.

The first BBN article on resources, fittingly enough, was by Antony Raja. His May 1981 piece was titled: “Fisheries resources in the Bay of Bengal: what do we know about them?” It was accompanied by a profile of Raja.

A four-year resources project funded by the UNDP (1983-1986) provided valuable knowledge on fish stocks of the region – such as the tuna resources of Sri Lanka and Bangladesh, the hilsa resources of Bangladesh, the scad and mackerel resources of Malaysia and Thailand, the tuna resources of Thailand and Indonesia in the Andaman Sea.

Dr K Sivasubramaniam succinctly summed up this project’s work in the May 1987 BBN. He said that the project reviewed management and assessment practices, investigated resources, helped to computerize data processing and stock assessment, trained national biologists in sampling techniques as well as in data collection and analysis, and brought out 15 publications.

What was the state of research on fishery resources in the region? Siebren C Venema did a cover story in the September 1985 BBN. He outlined nine key areas for resource research and action needed in each. The article was followed by concise data-laden “factsheets” in the BBN about fishery resources research in the region.

In August 1986, BOBP launched a two-year UNDP-funded project to study the abundance of reef fish resources in the Maldives and the gear that could best tap this resource. The project was reported and discussed in the March 1988, March 1989 and March 1992 issues of BBN.

The December 1992 BBN spotlighted shark-fishing in the Maldives. (This issue also described shark longlining on India’s east coast and the shark fin trade in the Bay of Bengal.)

Radio programme for Sri Lankan fisherfolk





The “shoe dhoni” community of Andhra Pradesh

In 1991, BOBP introduced studies on bio-socio-economics to the region. The idea was not merely to improve the catches and incomes of fishers but also to improve their knowledge on resources and strengthen their participation in resource management.

Dr Sivasubramaniam discussed the significant concept of bio-socio-economics in the December 1993 BBN. His article was followed by case-studies of six completed projects.

In sum, the BOBP’s projects and publications, and the articles in *Bay of Bengal News*, have made a noticeable difference to fisheries resources knowledge in the Bay of

Bengal. However, what still needs to be done in the region by way of resource information, databases and skill training is enormous.

Post-harvest fisheries

The BOBP initially carried out post-harvest activities – handling, processing and marketing of fish – through a project funded by the UK’s Overseas Development Administration (ODA). This then became an independent project executed and funded by the UK’s DFID under the BOBP umbrella.

Bay of Bengal News has published numerous articles over the years on post-harvest work: an aluminium fish container for fisherwomen, use

of ice aboard small-scale craft, a permanent ice box, fish drying racks, fish smoking, fish marketing, discard of shrimp by-catch at sea, market research into fish consumption, better feed for shrimp.

Fisherfolk communities

An excellent BBN article on fisherfolk communities was the cover story of September 1990 – on a fisher community of Chollangi (near Kakinada in Andhra Pradesh) whose boats, the “shoe dhonis,” are also their homes. Author Venkatesh Salagrama, who had been wanting to investigate the community even in his student days, and artist-photographer E Amalore spent three days tracking this community.

BBN has also featured articles on fisher communities in Bangladesh (May 1981, March 1984, December 1990); India (December 1986, March 1989, March 2000); Sri Lanka (September 1990, December 1981); Maldives (March 1991); Thailand (March 1990, June 1990); and Indonesia (June 1991). The script of an audio-visual on small-scale fisherfolk communities in the region was published in the December 1990 BBN.

Fisheries management

Fisheries management was the focus of the BOBP’s third phase, which began in 1995. Rationale: falling catch rates and rising pressure on fisheries resources everywhere, including the Bay of Bengal region. The BOBP’s mandate was to facilitate management by raising awareness, strengthening the capacity of fisheries agencies, and providing technical assistance.

BBN spread management awareness by reporting and analyzing project activities and workshops, analysing management tools such as the stakeholder approach; and discussing success stories on fisheries management.

The management projects carried out by BOBP in member-countries were remarkably varied. It was **integrated reef resources management** in the Maldives –



checking damage to coral reefs, and developing a model for community-based reef resources management in four atolls – Vaavu, Meemu, Faafu, Dhaalu. (See BBN of March 1997, December 1998, June 1999.) In Sri Lanka, BOBP sought to study and document **ornamental fisheries**, promote awareness through seminars and workshops, organise insurance schemes and training courses for ornamental fish divers, and suggest management approaches (See BBN, December 1996, December 1997, 1998, June 1999).

The BBN of December 1996 made a big impact within and outside the Bay of Bengal region with its package of articles on ornamental fisheries in Sri Lanka by Rathindra Nath Roy and S R Madhu. “We had heard so much about ornamental fisheries; we now know what it is,” was a comment from FAO Rome. The package contained factual interviews with ornamental fish divers; an interview-based article on Lumbini, Sri Lanka’s biggest ornamental fish exporter; and an overview-article on the industry, why it needed management, and the BOBP’s proposed activities.

In Bangladesh, BOBP sought to limit effort and resource damage caused by the **push net and set bagnet fisheries**, and simultaneously minimize hardship to the thousands of people who depend on these gear. UNDP, DFID and the Department of Fisheries took up BOBP’s work. (See the articles “Parliamentarians consider food and livelihood security issues of coastal Bangladesh” – BBN, December 1997; “Managing the push-net and set bagnet fisheries in Bangladesh,” December 2000 BBN).

In Thailand, the BOBP carried out a very successful **CBFM (community-based fisheries management)** project to overcome the problems of overfishing and resource stress in 110 villages of Phang Nga bay. The CBFM measures including a ban on trawl



Ornamental fishes in reef ecosystem, Maldives

nets and push nets within 3 km of the shoreline; culture of finfish, oysters and mussels; installation of artificial reefs; voluntary surrender of push nets by fishers; sea ranchings; floating pontoons on the sea (See BBN of March 1997, June 1998, September 1998, December 1998, June 1999).

BOBP’s summary of the CBFM project in Thailand was published in the third volume of the book “Sustainable development success stories” brought out by the U N Commission on Sustainable Development. The story was reproduced in the September 1999 BBN.

In India, three different management projects were carried out. In Kanyakumari district, Tamil Nadu, the aim was to **use GIS to produce maps on fishing intensity**, a first step toward scientific management. In Andhra Pradesh, **stakeholder** consultations were conducted to solve problems that plagued **shrimp culture**. A lavishly illustrated comic book was produced on shrimp culture to raise awareness of problems and of management techniques. In West Bengal, the use of **PRA as a tool for data collection and analysis** was popularized (See BBN of March 1997, March 1998, December 1998, June 1999, September 1999).

In Malaysia, a **Special Area Management Plan** was implemented for the Pulau Payar

Marine Park. It sought to integrate land and water management, test strategies to strengthen eco-tourism and ensure resource sustainability, enhance knowledge about the carrying capacity of the park, strengthen underwater biodiversity. The project led to valuable lessons for the **management of marine parks in Malaysia**. (See BBN of December 1998).

In Indonesia, the problems were **inadequate management and enforcement**, and resource conflicts between groups of fishermen. BOBP adopted a two-pronged strategy of promoting CBFM concepts at the national level and organizing stakeholder consultations and technical inputs at the local level. A BOBP study researched traditional community-based fisheries management in six provinces of Indonesia. An ADB-funded project grew out of this study (BBN, December 2000).

The Code of Conduct for Responsible Fisheries (CCRF) was highlighted and promoted in the region by the BOBP. A special issue of BBN (September 2000) explained the provisions of the Code and its technical guidelines. A **“Fishermen’s Week,”** held in some member-countries, was used to inform fisherfolk communities about the Code.

The BOBP’s director during its third phase, Dr Kee-Chai Chong, was passionately committed to the



Small-scale fisheries – an important component of marine fisheries in Bangladesh

concept of management. Through his many articles in BBN, he kept drilling the messages: respect nature, conserve resources, save more and spend less, tap the wisdom of the ancients, think about the future.

The BBN published several articles that documented the learnings from the third phase of BOBP, on the basis of the findings of a two-member mission – Mr G L Preston and Dr Y S Yadava (March 2000 and June 2000 BBN).

Reviews of BOBP

Two articles in *Bay of Bengal News* have summarized in words and pictures the work of the organization over the first 20 years. The December 2000 BBN carried the article “Glimpses into the BOBP’s achievements, 1979-2000,” describing the Programme’s work phase by phase. The January 2002-March 2003 issue, a curtain-raiser to the formation of the BOBP-IGO, presented in a nutshell the BOBP’s work over 23 years by discipline.

Sustainable development and management of coastal fisheries

The BOBP-IGO came into being in April 2003, with Bangladesh, India, Maldives and Sri Lanka as members. Its goal: Sustainable development and management of coastal fisheries. The emphasis is on shared learning and information exchange. Activities: Safety at sea, Code of Conduct for Responsible

Fisheries, poverty alleviation, women’s issues, reducing post-harvest losses, stock assessment, knowledge exchange and transfer.

The director of the IGO, Dr Y S Yadava, served earlier as India’s Fisheries Development Commissioner, and had contributed articles to *Bay of Bengal News*. He sees the BBN as an important instrument to carry out the mandate of the IGO. Six issues of the BBN have covered the IGO phase.

BBN has documented and analysed the destruction caused by the tsunami of December 26, 2004, including a one-day consultation among fisherfolk throughout Tamil Nadu in Chennai, and a post-

tsunami workshop in Mahabalipuram. As a positive measure for the fisheries of tomorrow, the IGO organised art contests on “Life after Tsunami” for schoolchildren of India, Sri Lanka and Maldives. Two well-illustrated articles in BBN, and a beautiful calendar for 2006, were part of the outcomes.

The BBN has constantly drawn the attention of the global community to occupational hazards connected with sea fishing – through the Regional Conference on Sea Safety held in Chennai during October 2001, which adopted a “Chennai Declaration” and subsequently through IFISH-3 (The Third International Conference on Safety and Health in the Fishing Industry) held in Mahabalipuram in February 2006. The Conference and its papers have been published in detail in BBN.

The BBN is becoming an important print medium for publicizing the implementation of the Code of Conduct for Responsible Fisheries in the region. It is popularizing the CCRF in several ways – reporting the activities of the IGO in member-countries, articles on the CCRF Technical Guidelines, etc.

Way back in 1982, a reader in Colombo exclaimed, “Every issue of *Bay of Bengal News* seems to be better than the previous one.” That was a conscious aim, and it will continue to be so.

Life after Tsunami – Malé school children participating in the art contest



The proposed ILO fishing standards and their relevance to small-scale fisheries

Sebastian Mathew, *International Collective in Support of Fishworkers*

A majority of the world's fishers are from artisanal and small-scale fisheries. Small-scale fishing vessels now go out further into the sea than before and even employ labour on wages. The author outlines the proposed ILO labour standards for fisheries (which will come up at an ILO Conference in 2007) and argues that these are capable of addressing critical issues concerning small-scale fisheries – such as safety, health, social security and working conditions.

Fisheries is one of the main sources of income and food security in several developing countries, particularly in Asia and Africa. An estimated 28 million people, including some 15 to 20 million small-scale fishers, depend on marine capture fisheries for employment and income.

About 45 per cent of the marine fish production for direct human consumption originates from small-scale fisheries.

Most fishers work onboard vessels less than 24 m length overall (LOA) or 100 gross tons (GT). In fact, a majority of fishing vessels, both in developed and developing countries, are below 12 m LOA. Large marine fishing vessels (above 100 GT or 24 m LOA) number about 24 000 and employ about 200 000 people.

This article is based on a presentation made by Mr Sebastian Mathew at the Third International Conference on Fishing Industry Safety and Health, Mahabalipuram, Chennai, 1-4 February 2006.

Under the 1982 U N Convention on the Law of the Sea, small-scale fishing vessels no longer confine themselves to the littoral waters. They are now found all over the exclusive economic zones (EEZ) and even beyond, including the waters of other coastal States. Some significant technological adaptations have made this possible. Those on board include not just fishers and family members but hired labour, even migrant workers. Distinct work categories are emerging in small-scale fisheries – of worker, skipper and owner. Employer-employee relations are a fact of life.

Proposed ILO labour standards for the fishing sector

The proposed Work in Fishing Convention, 2005, was to be adopted at the 93rd Session of the International Labour Conference in

June 2005 at Geneva. Since the required quorum was not attained, the proposed Convention will once again come up for voting at the 96th Session of the International Labour Conference in 2007.

The proposed ILO labour standards for the fishing sector intend to reach more of the world's fishers, particularly those working on board smaller vessels, than before. The Convention, *inter alia*, has proposed for adoption a set of general principles, plus minimum requirements for work on board fishing vessels, conditions of service, accommodation and food, medical care, health protection and social security, and compliance and enforcement.

The definition of “commercial fishing” has been broadened to include all but subsistence and

Royapuram fishing harbour, Chennai, India – Young fishers at work



recreational fishing in marine and inland waters. The term “fisher” has been broadened to include persons working on board who are paid on the basis of a share of the catch. Protection provided for fishers working on vessels 24 m and over may be extended to fishers working on smaller vessels as well.

On the other hand, provisions have been proposed to exclude fishing vessels operating in rivers, lakes and canals from the requirements of the Convention. A decision on these provisions will be taken in consultation with representatives of employers and fishers.

The proposed Convention is thus more flexible. It moves from larger to smaller fishing vessels, and from fishers aboard larger vessels to those on smaller ones. The Convention and its standards are capable of responding more meaningfully to the safety requirements of small-scale fishing vessels.

(i) “General Principles” of the proposed Convention: While the fishing vessel **owner** must ensure that the skipper has the resources and facilities to comply with the obligations of the Convention, the **skipper** is responsible for the safety of fishers on board and the safe operation of the vessel. The skipper has to ensure that fishers perform their work in the best conditions of safety and health.

(ii) Minimum requirements to work on board fishing vessels: These are attainment of a minimum age and passing of a medical examination. Minimum age provisions will apply to fishers on board all types of fishing vessels; the medical certificate requirement is proposed mainly for fishers on board vessels 24 m in length or longer, or for fishers of vessels that stay at sea more than three days.

The minimum age for work on board a fishing vessel will be 16 years. This could be reduced to 15 years for persons who are no longer subject to compulsory schooling. But the minimum age for activities on board fishing vessels

that are likely to jeopardize the health, safety or morals of young persons will be not less than 18 years. The engagement of fishers under the age of 18 for work at night is prohibited on health grounds.

Fishers who work on board fishing vessels are expected to hold a medical certificate of fitness to perform their duties. However, exemptions could be made for fishers aboard fishing vessels that are less than 24 metres length.

For vessels 24 m in length and over, or vessels that normally remain at sea more than three days, a medical certificate must attest that the fisher’s sight and hearing are satisfactory for vessel duty. Also, that he/ she has no medical condition that will endanger the health of other persons on board, or that will get aggravated by service at sea.

(iii) Conditions of service

These describe provisions for manning and rest hours, a crew list, a fisher’s work agreement, placement and repatriation of fishers, and payment of fishers. Owners of fishing vessels are to ensure that the vessels are sufficiently and safely manned with at least the minimum crew necessary for the safe navigation and operation of the vessel. The owners are also to ensure that fishers are given enough regular rest to ensure their health and safety.

It may be difficult to apply this standard to small-scale fishing vessels that are operated by owner-operators, especially to those engaged in near shore operations. However, the requirement is relevant to small-scale fishing operations of longer duration. It is particularly applicable to fishing vessels with separate categories of owner, skipper and worker. Example: the multi-day fishing vessels of Sri Lanka or India.

There are additional requirements for minimum manpower levels for the safe navigation of vessels 24 m in length and over. Minimum rest

periods are stipulated for fishers in vessels – regardless of size – that remain at sea more than three days.

Every fishing vessel is required to carry a crew list and give a copy to the competent authority ashore. This requirement will help the authorities to identify and rescue someone who is lost at sea, or provide benefits to the right people in the event of death at sea. This crew list requirement is difficult to implement for beach-based fisheries, but is very relevant for multi-day fishing operations – especially those undertaken in distant waters.

It is proposed that ILO member-states should pass a law helping fishers – they should be protected by a work agreement they can understand. But it seems as if this law would apply mainly to international fishing vessels. How it would apply to small-scale fishing vessels that do not have distinct owner-skipper-worker categories is not clear.

A fishing vessel owner must repatriate a fisher at his/ her (the owner’s) expense if the fisher’s work agreement has expired, or if the fisher can no longer carry out his/ her duties on entering a foreign port. If the owner fails to repatriate the fisher, his/ her country must do so and recover the cost from the owner. Workers on small-scale vessels that fish in the EEZs of other countries could benefit from this regulation. But no such work agreements exist in practice.

Any private agency that recruits fishers should comply with a standard system of licensing. The State must regulate the system to ensure that fishers are not prevented from working, and that they are not charged any fees for recruitment. If such regulations are violated, the private agency must be suspended or its licence withdrawn. Such a law will benefit migrant small-scale fishers, especially those from South Asia working on fishing vessels in the Middle East, including small-scale vessels.

ILO member-countries must ensure that fishers are paid regularly and are able to send money to their families at no cost. This provision will benefit fishers on small-scale fishing vessels too, especially those working abroad, or those using foreign ports to land fish or change crew.

(iv) Accommodation and food

The draft Convention proposes that accommodation on board fishing vessels should be appropriate – in size, quality and equipment – for the vessel's duties and for the length of time fishers live on board. Some of the points would apply to small-scale fishing vessels that go out on 3-day fishing trips or longer, and will have the effect of reducing fatigue and disease among fishers. The provisions for adequate supply of nutritional food and potable water are particularly relevant to fishers of small-scale fishing vessels that undertake multi-day fishing.

(v) Medical care, health protection, and social security

It is envisaged that fishing vessels will carry medical equipment and supplies that are sufficient for the number of fishers on board the vessels, the area of operation and the length of the voyage. At least one person on board must be qualified or trained in first aid and must be capable of using the medical equipment.

Fishing vessels should be equipped for radio or satellite communication with services ashore that provide medical advice. Fishers are entitled to medical treatment ashore and to be taken ashore promptly for treatment in the event of serious injury or illness. There are mandatory measures for medical care of fishers on fishing vessels of 24 m in length and over.

Some measures relate to occupational safety and health and accident prevention. The emphasis is on developing legal regimes that seek to prevent occupational accidents and diseases. Work-related risks on board fishing vessels must be reduced as well, through

management and training and onboard instruction of fishers.

Fishers must be trained to handle the fishing gear they will use, and comprehend the fishing operations they will engage in. It is proposed that for fishers under the age of 18, fishing vessel owners, fishers and others will be jointly responsible for their safety and health.

Accidents on board fishing vessels must be investigated and reported. Under informal regimes to recruit and employ fishers on fishing vessels, it may be difficult to introduce risk evaluation and management. The recruitment system for fishers would have to change to bring in new perspectives on occupational safety, health and accident prevention.

Some additional measures are proposed for vessels larger than 24 m that normally remain at sea more than three days. These relate to owner responsibility for onboard procedures to prevent occupational accidents, injuries and diseases. The fishing vessel's owner, skipper and fishers must be given guidance and training on how to assess and manage risks to safety and health on board fishing vessels.

The member-country must extend social security protection to fishers ordinarily resident in its territory. The conditions for such security must be comparable to those applicable to other workers. Comprehensive social security protection for all fishers is proposed as a long-term goal. Bilateral and multilateral agreements are proposed to progressively achieve this goal for fishers. Unions of small-scale fishers in several developing countries are demanding social security for fishers working on smaller vessels.

The member-country must ensure that fishers are protected against work-related sickness, injury or death, through a system of compulsory insurance, worker compensation or other schemes that impose certain obligations on fishing vessel owners. Fishers

should have access to medical care and compensation in the event of injury due to occupational accident or disease.

In the absence of national provisions for fishers, each member-country must ensure that fishing vessel owners are responsible for health protection and medical care for fishers. Vessel owners should defray the expenses of medical care during treatment in a foreign country until the fisher has been repatriated.

(vi) Compliance and enforcement

Member-countries are required to exercise effective jurisdiction and control over vessels that fly their flag. They must do this by establishing systems for compliance with the standards of the Convention – including inspection, reporting, monitoring, complaints procedures, appropriate penalties and corrective measures.

The port State is required to inform the government of the vessel's flag if it receives a complaint – from a fisher, an association or a trade union — that a particular vessel does not conform to the standards of the proposed Convention.

In conclusion, the ILO developed standards for the fishing sector some 40 years ago. The proposed Fishing Convention reflects changes in the sector during the past 40 years. It broadens the scope of fishing standards to benefit fishers on smaller fishing vessels. It addresses critical issues such as safety and health in fisheries, and the social security of fishers.

The ILO Convention is therefore relevant for small-scale fisheries. As the sector transforms further, the Convention – once adopted – will be even more relevant and useful in improving labour standards even for smaller vessels.

References:

FAO. 2004. The State of World Fisheries and Aquaculture 2004. FAO, Rome.

ILO. 2005. Provisional Record 19. 93rd Session, ILO, Geneva. Pp: 96-121.

As Others See *Bay of Bengal News*

Here's a sampling of some reactions to Bay of Bengal News on the occasion of its completing a quarter century.

“Always different from other publications”

In the first half of the 1980s, when I was Training and Extension Officer, of the BOBP, its newsletter was read with great interest within and outside the Bay of Bengal region. Many of its readers were active players in development.

During these early years of small-scale fisheries development in the Bay of Bengal, *Bay of Bengal News* stimulated debate on a number of innovative and challenging issues – such as the role of women in the development of rural communities; the consideration of economic and social concerns *vis-à-vis* a simple transfer of technology; access of rural communities to rural infrastructure and services; as well as the need to adapt technologies and methods to the needs and circumstances of small-scale fishers and fish farmers.

Bay of Bengal News has always been different from other development publications. The most important difference is probably that the readers of BBN became a part of



the wide spectrum of partners and stakeholders who took part in the BOBP's development initiatives.

Thus, a long-term relationship was established between readers and the newsletter. This may be one of the reasons why readers still remember articles in the *Bay of Bengal News* long after they appeared, and why the BBN has had a long-lasting impact on many of its readers.

To cite an example. I attended the World Congress on Agricultural and Rural Finance in Addis Ababa, held on November 25 – 27, 2005. After my presentation on the prospects and challenges of agricultural and rural finance in Asia and the Pacific, representatives of several financial institutions approached me and asked whether I had been associated with the fishery credit activities of the BOBP. Reference was made, among other things, to articles in *Bay of Bengal News*. I was certainly pleased to confirm my association!

It is interesting to note that the principles that guided the successful credit programmes for fishing communities in Orissa (“Bank credit for fisherfolk: Orissa sets an example”. BBN, March 1984), have now been widely adopted by most agricultural and rural banks in Asia for their rural credit and microfinance operations.

When visiting Orissa again two decades later in 2005 on a mission for FAO, I was pleasantly surprised to see that the Marine Fisheries Extension Service (MFES) which I had helped to establish in the first half of the 1980s, was still operating. Staff of the MFES were aware of the past history and achievements of the service, probably due to the article “In-service training of Orissa extension officers: an assessment” in the June 1985 issue of *Bay of Bengal News*.

I was also pleased to learn that the efforts to raise the literacy and awareness levels among Orissa fisher communities – which I helped through the BOBP – were now being continued by NGOs.

Members of both NGOs and the marine fisheries extension service, remembered the *Bay of Bengal News* articles on the non-formal primary education curriculum introduced by BOBP in the beginning of the 1980s – such as “Orissa fisherfolk children learn the 3 R's and more”, BBN, December 1984, by S R Madhu and “Orissa fisherfolk children – a first rate performance”, BBN December 1985, by Namita Ray.

These articles had obviously succeeded in promoting educational efforts among Orissa's fishing communities – which in turn are helping fisherfolk improve their livelihoods, their participation in local government, their conservation and management of natural resources.

– Uwe Tietze
Fisheries Consultant, USA
(formerly Fisheries Industries Officer, FAO Rome)

“The only formal source of fisheries news in the Maldives”

Bay of Bengal News has been a very important source of information dissemination on coastal traditional fisheries issues in the region. It has always focused on the most critical regional fisheries and aquaculture development issues, fishing craft, gear and methods. BBN is probably the only formal publication with news and features on Maldivian fisherfolk and on socio-economic issues. I would not hesitate to characterize BBN as the voice of information on fisheries in the Bay of Bengal region.

I congratulate all those who have contributed to the production of BBN regularly over the past 25 years – especially Dr Y S Yadava, who has worked tirelessly to compile such valuable banks of

information. I think it would be worthwhile to PDF all the back issues and make them available on your website in a searchable form.

– **Abdulla Naseer**
*Executive Director,
Ministry of Fisheries, Agriculture &
Marine Resources, Maldives*

BOBP and the BBN

The BOBP during its past 25 years has filled a huge gap in fisheries development. Until this Programme came to the scene, marine fisheries focused routinely on fishing and technology-related issues. Socio-economics was limited to data collection and statistics. The BOBP's many studies and programmes brought little-known socio-economic aspects to the fore. *Bay of Bengal News* explained and summarized such studies with clarity, conviction and charm.

I think the BOBP's work has not been utilized wisely. Its findings – reported and analysed so well in *Bay of Bengal News* and the many technical reports – have not been examined, let alone implemented. Reasons? Possibly lethargy, lack of finance for follow-up, lack of staff, lack of planning, lack of understanding about the seriousness of various issues. Whatever the reasons, the BOBP's good work has not fully translated into benefits for fisherfolk.

BBN and other publications of the BOBP ought to have been translated from English to the vernacular. The messages on overfishing, management, diversification, coastal aquaculture, post-harvest handling, processing for value addition, marketing of fish catch, basic infrastructure, fisherfolk problems, technology upgradation, etc, have reached only a few.

Studies and pilot projects, however good, are not enough. They merely adorn bookshelves. Only field-level implementation on a wide-scale can make an impact on fisheries and fisherfolk. The BOBP should not depend on Government agencies for

actual implementation. It has tried implementation in a small way; with its small budget, it could not do more.

A few demonstrations in a few fishing villages don't go far. BOBP should have adopted a few fisher villages and made them show-windows for holistic development. This would have caught the attention of Government agencies and induced large-scale replication. *Bay of Bengal News* could have helped the process.

In future, BOBP should put more effort into weaning fishers away from fishing and induce them to take up coastal aquaculture and seafarming. Polyculture of shrimp, mudcrab, Chanos/ mullets and seaweed; seaweed farming in the open sea; cage culture of finfishes in wave-resistant cages in the open sea; bivalve farming in coastal waters – these should be promoted as livelihoods of promise in India. I hope to read about these efforts in *Bay of Bengal News*.

The coastal aquaculture and mariculture technology of Southeast Asia and China should be introduced in India through demonstration and training. Livelihood support programmes should be organized to rehabilitate estuarine and inshore traditional fishermen who harvest juveniles in bag/ stake nets, or carry out shore seining or dynamite/ cyanide fishing. Successful programmes in



one or two villages will serve as a model for more.

I'm all admiration for the many attractive articles in *Bay of Bengal News* illustrated with photographs, sketches and diagrams. They have been very effective communication tools. I would also like to congratulate BOBP's staff over the years. If the Programme carries out some of the suggestions I have mentioned, the impact on small-scale fisheries and fisher communities will be huge.

– **M Sakthivel**
*President, Aquaculture
Foundation of India, Chennai*

Declining Appetite for Responsible Fisheries Management

During its third phase from 1995, the BOBP tirelessly promoted the virtues of fisheries management, and tried out an array of initiatives in all the seven member-countries. These were often discussed in *Bay of Bengal News*. The response was good. But where is management now?

The appetite for fish (used generically to include food and non-food fish) continues to grow. International trade in fish products alone is worth about US\$ 71 billion annually. This appetite would even be greater if fish prices are lower. However, interest and commitment to manage the fisheries do not seem to grow in tandem. In the field, on the ground, very little management is visible. It is business as usual, whether on shore or in the sea.

In fact, the appetite for responsible management of the fisheries has declined since the Code of Conduct for Responsible Fisheries was first introduced in 1995. After a flurry of activities in the name of responsible fishery in the early years of the Code, not much has happened.

Everywhere, fish catch is declining, and fishers are struggling to cope. Fisher incomes may have increased at times, from higher prices stemming in part from growing

global appetite for fish. But after more than 10 years since the Code of Conduct was brought into being, management activity is still largely confined to talks and Power Point presentations. If any 'management' activity goes beyond the four walls, it is only for a field trip or quick visit to a site where the management process is stage-managed.

Even at the international level, interest in management matters has declined just like the fish landings. So has commitment to management. At best, half-hearted old measures are repeated. No imaginative and exciting initiatives are in the works or on the drawing board.

After the early excitement and enthusiasm for the Code of Conduct for Responsible Fisheries, we have hardly started to walk the talk on responsible management.

But BOBP and *Bay of Bengal News* ought to continue the crusade for fisheries management. Who knows, there will be better times, and we will actually see some action.

– **Kee-Chai Chong**

(Director of BOBP from 1995 to 2000, now a Consultant)

Bay of Bengal News, a boon for extension workers

This incident happened around 1993. The Collector of East Godavari District, who was reviewing the performance of different line departments, suddenly turned to the officer in charge of fisheries and asked him, point-blank: "So where do we stand with the FADs?"

The officer was taken aback – it was too sudden and, frankly, he had no idea what FADs were and where the District Collector had picked them up. It was a time few people even in the fisheries department had heard of the fish aggregation devices or what they were supposed to do. Fortunately, the Collector was in a good mood and actually took the trouble to explain to the hapless junior bureaucrat that he'd read

about the FADs in an issue of the *Bay of Bengal News* while he had been working in another coastal district and the article had stayed in his memory all this time. "Do you think you could get me a copy of the BBN that carried the article so I can read it again?" he requested the fisheries officer.

The officer assured the Collector that he would do his best and, knowing that I maintained a collection of the BOBP publications, rushed to my office at the conclusion of the meeting. His first comment when he saw me was, "Did you know that the Collector has a fad for FADs, whatever they are?" He borrowed the relevant issue of BBN and read the article carefully, complaining, "Who knows what he might ask next?" before going back to the Collector's office waving the newsletter like a prize trophy!

My association with the BOBP had started even before *Bay of Bengal News* came into existence. I had been working since May 1980 with a team of specialists. We were involved in designing, developing and testing the prototypes of a new batch of beachlanding crafts (which would eventually give rise to the IND-20 and its other variants that would become so common along the east coast of India over the next decade) when I received my copy of

the first issue of the *Bay of Bengal News*.

I remember I flipped through its pages rather casually, assuming it to be one of those 'in-house' publications given to self-promotion and gave it no further thought at the time. It was only with the second or third issues that my curiosity was stirred and I realised that the *Bay of Bengal News* was no run-of-the-mill journal – it had a sharp focus on small-scale fishers and their livelihood issues. It was pleasantly surprising to see the BBN devoting many pages in each issue to discuss the diversity and complexity that characterise life in a fishing community, aided in no small measure by magnificent black-and-white photographs as well as even more beautiful illustrations that would come to be recognised as 'BOBP Art' – so top-class that they remain unmatched to this day.

Naturally, it took the magazine a very short time to reach all levels of administration in Andhra Pradesh – from the Principal Secretary to the Government right down to the fisheries field personnel in the remote coastal villages – encompassing *en route* the District Collectors, the district-level officers of fisheries, rural development and other line departments, financial institutions as well as research and academic institutions.



The elegant and thoughtful layouts, and the many photographs and illustrations, made the pages easy on the eye. Additional incentives like the lack of distractions (such as advertisements) meant that it was soon competing rather successfully against the few commercial fisheries journals we had in the country. It was not unusual for District Collectors to prepare themselves for a meeting with a visiting expert by quickly going through some back issues of the BBN. I can vouch from personal experience of not only being there when this happened, but of also being the supplier of the relevant journals myself. It was sometimes difficult to get the magazines back, but I was no stickler for protocol when it came to retrieving my precious collection.

The BBN covered most important developments concerning fishing crafts, gear, aquaculture, fishery resources, fishermen and their socio-economics, all of which were quite vital for development policy making and implementation, so it almost became compulsory reading for everyone in fisheries. True, the other publications of the BOBP provided more exhaustive and detailed information on various issues, but *Bay of Bengal News* provided chunk-sized bytes of easily-digestible information that went down well with the non-‘fishy’ types in the administration.

For the ‘fishy’ bunch, which included me, the importance of the BBN also lay in the fact that it was helping us to upgrade our knowledge on different issues and taking us into new and as yet uncharted territories like fisheries management, coastal aquaculture and, perhaps most significant of all, the socio-economic spheres of life in fisheries.

The energy that the BBN developed through the 1980s seemed to have been dissipated by the early 1990s. There was a sizeable reduction in the number of people receiving the newsletter, probably due to funding constraints. It continued to come out

regularly, but its reach was confined to a much smaller circle of people and those who had been left out were justifiably upset. I was one of the casualties of the ‘cull’.

If you had been a frequent reader of a particular journal that suddenly decided to fold up or refuse to send you your copy, you’d understand how I’d felt. I find the need to read many of the back issues of the *Bay of Bengal News* even now, for professional reasons as well as out of nostalgia, and I do seem to find them more valuable with each reading. Once again, it is on the nostalgia front that the other publications brought out by the BOBP cannot beat the BBN, which remains a magnificent collation of people, events, things, projects and so much more that made life look so exciting and interesting!

Anyway, it is my fervent hope and desire that, as it enters the 26th year, BBN will reach out to new readers and provide them with the same information-edge that people of my generation received from it.

– S B Sarma

*Assistant Director (Retired)
Department of Fisheries,
Andhra Pradesh*

“Bridging the gap between the local and the global”

The objectives of BBN were to inform fishery specialists, administrators and laymen about BOBP’s work, and in this it was quite effective. Over the years there have been several interesting articles in BBN – on the need to ban bottom trawling, on fishermen cooperative societies, on costs and earnings of fishermen in Kerala, on fisherfolk from Phang Nga Bay in Thailand voluntarily surrendering pushnets for gillnets, on the problems faced in Besant Nagar fish market, on issues of shrimp culture on the Indian East Coast, and so on.

BBN has tried to bridge the gap between the local and the global and

has carried information on local developments as well as developments at the international level – the Code of Conduct for Responsible Fisheries, international instruments on the safety of fishing vessels, etc. BBN has certainly made for informative reading. It has also carried reports on the various trials undertaken by BOBP to improve fishing gear technologies in the region. Perhaps some of the articles – on beach-landing crafts and high-opening bottom trawls, for instance – were more promotional than informative. It would have been interesting to carry different perspectives on the pros and cons of these technologies.

No doubt a publication such as BBN had an important role, particularly as it enhanced the visibility of small-scale fisheries and their communities, and notably of women in the fisheries sector. It continues to serve as an important reference material on the fisheries in the Bay of Bengal region. It can be effectively used by projects and policy-makers, to learn from past experiences, positive and negative.

– Chandrika Sharma

*Executive Secretary,
International Collective in Support
of Fishworkers. Chennai*



The best and the brightest of *Bay of Bengal News*

Eighty issues of *Bay of Bengal News*! So many wonderful articles, photographs, layouts. How does one pick the best of them? The criteria for inclusion in this article: articles strong in ideas which have made an impact on our readers; visuals that are striking in terms of creativity, imagination and aesthetic delight. In other words, only what's exceptional and outstanding.

Let me begin with two charming photo essays early in BBN history, fairly novel for fisheries magazines. But both these were cited in the article on BBN history (page 16). The first photo essay was in the second issue (May 1981), on Bangladesh – terrific photographs by Harry Miller. The next photo essay was in December 1981, a selection of photographs from our October 16 photo exhibition held in Chennai. The essay was as much a social statement on small-scale fisheries as on the art and craft of photography. The photo exhibition was a major exercise in public awareness-raising, so was the BBN that reported on it.

The same issue (December 1981) must be rated one of the best ever in BBN – the depth in content matched the visual appeal. It was a Sri Lanka special. An excellent article on Sri Lankan fisheries was illustrated, ingeniously, with photographs enclosed in a map of Sri Lanka. A graphic article on Negombo (with a big two-page spread of Negombo boats under sail), a piece on demersal fisheries by G H de Bruin, and a four-pager on women in Sri Lankan fisheries – every piece a little gem.

The fifth issue (March 1982) was also a champion. Its highlights; picturesque coverage of the Bay of Bengal Committee inaugural in



Colombo; a Q & A interview with John Kurien about the Kerala costs and earnings study carried out for BOBP by the Fisheries Research Cell ; a four-pager on sails with a splendid breath-taking double-spread sketch on sails; and visually innovative articles on women's projects and on "Planning from below in Adirampattinam." (The bottom half of the two-page spread was an eye-stopper: a group of fisherfolk bicyclists shot against a village backdrop, across a pool of water that reflected their images.)

The March 1983 BBN carried a poignant two-page photograph of fisherwoman Tillai and two of her children. Rarely has the mood of despair and fatalism in a person's face been captured with such stark realism. It was part of an article on the poverty of a typical fishing family.

The July 1983 issue had three of the most imaginative photo creations a fisheries reader would have come across. For the first, the artist cut out the word "Killai" from the photograph. It can't be described, take a look at the cover of the July

1983 BBN. The second was a panoramic presentation of the Killai pen-culture project, assembled from half a dozen photographs by artist-cum-photographer E Amalore. The third picture was referred on page 18.

This issue also contained an important pictorial report. Heading: "All the BOBP's men (and women) – hundreds of them!" The message: Though only a couple of dozen staff worked at BOBP in Madras, as many as 4 000 people took part in BOBP's work at that time: in fishing villages, beaches, boatyards, fish ponds, pens and cages, out at sea. These included boatbuilders, net-makers, mechanics, welders, labourers, social workers, extension workers, government counterparts, fisheries experts.

The September 1983 BBN presented a few splendid visuals. The article "Bay of Bengal Committee meets in Madras" silhouetted a xerox image of the Mahabalipuram shore temple against the horizon as a symbol of Tamil Nadu; the text was reversed in white on a black screen. An article on "tree fishing" in Tamil Nadu carried an unforgettable picture of a

huge tree branch being taken to the sea on a kattumaram. In fact Harry Miller, who shot that picture, asked us what these fishermen were doing with that tree. We got two Tamil Nadu fisheries officials, S Pandurangan and P V Ramamoorthy, to describe the use of tree branches as an FAD.

The December 1983 BBN featured a cover package on sail power, reportage on a sail consultation and a sail contest, with sketches of different types of sails. The Gunter rig was the winner for medium-sized boats (sail area of 20 to 30m²) and large boats (30m²).

The March 1984 BBN came in for high praise from FAO Rome. It should be considered one of the strongest BBN issues of the first BOBP phase – thoughtful and provocative articles on varied subjects: the success with bank credit for Orissa fisherfolk; the experiments in Sonadia island; jewfish export from Cox’s Bazar – a comprehensively illustrated feature on a major enterprise in Bangladesh that began as an act of serendipity.

The June 1984 BBN cover story “When foxes entered a shrimp pond,” with a sketch of two foxes, was one of the most widely read stories in BBN! It was about BOBP’s shrimp culture project in Polekurru, Andhra Pradesh. Another popular story: A six-pager by Swedish artist Signar Bengtsson, a votary of sails, with nine interesting sketches of traditional craft under sails. Also significant was a story on BOBP’s effort in Bangladesh to raise the incomes of women from fishing villages.

The September 1984 BBN had an outstanding visual to illustrate an article that profiled Angamma, a fisherwoman. A double-spread photograph of her carrying a basket of fish was silhouetted against the landscape. The same issue also carried a six-page article by director Lars Engvall analyzing the impact of BOBP work. He discussed four types of impact – negative, negligible, positive, potential. A

third notable article was on fish stock assessment by Daniel Pauly.

The September 1986 BBN carried an excellent analytical article by Arne Andreasson on “Ensuring effective follow-up to BOBP pilot activities”. The December 1986 BBN, a special on “people’s participation,” has been discussed on page 19. The March 1987 BBN contained a cover package on shrimp culture that was featured by an FAO Rome publication that highlighted newsletters. (See page 18.) The March 1988 BBN carried the insightful article “No easy solutions for set bagnet fisherfolk”, based on a study by five national fisheries staffers. The June 1988 BBN focused on Malacca Straits – with articles on extension activities in the Ranong project, Thailand; oyster culture, Malaysia, and fisherfolk credit, Indonesia. This issue also reported on a Swedish “minor field study” project about the marketing of beachcraft catches in Puri, Orissa, with action photographs from Delhi, Calcutta and Puri, and a much-in-demand full-page sketch tracing the flow of beachcraft catches from Puri to various destinations.

In the September 1988 BBN, the cover package on “Safety at Sea” highlighted the experiences of Sri Lankan fishermen who had drifted to Indonesia. Consultant Urban Hallberg discussed the action Sri Lanka needed to take on many fronts to ensure safety at sea. Post-harvest technology was the cover package in December 1988 – articles on use of ice in Andhra Pradesh and Sri Lanka, fish smoking in the Maldives, discard of shrimp by-catch at sea.

The last page of the June 1989 issue – an obituary of Antony Raja – inspired comment from far and near. In the September 1989 BBN, a significant article compared offshore tuna exploratory projects in Sri Lanka and Maldives.

Fisheries management had started becoming a serious issue, and the December 1990 BBN featured a

cover-story interview with Dr Armin Lindquist, FAO’s Assistant Director-General of Fisheries, “Management is the only solution”. A lovely four page photo feature on extension activities in Bangladesh was another highlight.

The June 1991 BBN carried a cover feature on “The life-giving death-taking waters of Bangladesh” by S Muthiah, his first issue as editor. (He edited the next 12 issues as well.) He discussed the horrors of the April 1991 cyclone which killed more than 150 000 people and wrought havoc to the fisheries sector worth \$130 million. The September 1991 BBN carried a photo feature on boats in Nias island, Indonesia, and reports on BOBP’s radio project in Sri Lanka.

An interesting fish marketing profile of a bicycle fish trader in Sri Lanka was one of the highlights of the June 1992 BBN. Extension activities and a bio-socio-economic study of set bagnet fisheries, Bangladesh, were other significant articles. Pelagic sharks in the Indian Ocean were for the first time the cover focus of BBN in December 1992 – with a cover article on the shark resource by fisheries biologist K



Sivasubramaniam; an analysis of shark fishing in the Maldives by R C Anderson and Hudha Ahmed, an article on shark longlining on India's east coast by Thomas Dahlgren, and a report on shark fin trade in the Bay of Bengal.

What's the effect of the marine environment on fisheries in the Bay of Bengal? This was discussed in the March 1991 BBN by Swedish environmental adviser Staffan Holmgren. Also in this issue, studies on the killing of dolphins in Sri Lanka – showing that only 5 200 dolphins a year were killed, not an alarmist 60 000 – were analysed by Leslie Joseph and Pauline Dayaratne.

The June 1993 BBN discussed 50 issues of BBN, an important article on research needs for fisheries management by K Sivasubramaniam, and an analysis of new outrigger canoes in Sri Lanka by G Pajot. BOBP's brilliantly researched and presented comic book "Our fish, our wealth" was evaluated by Rathin Roy in the September 1993 BBN. "Can trickle-down economics work in the shrimp culture industry?", asked Charles Angell.

The December 1993 BBN was a landmark – a farewell letter from publisher Lars Engvall, plus a cover feature "A new approach to fisheries management" with an imaginative cover sketch on bio-socio-economics and a package of articles inside. Leslie Joseph analysed the prawn culture boom in Sri Lanka while Charles Angell revisited Polekurru, Andhra Pradesh – a picture far different from the one about a decade ago.

The Management Phase

The management phase of BOBP began in 1995. BBN was no longer "crowded" with people, events and activities as in earlier phases. Its articles in this phase were contemplative. Many creative sketches adorned the pages of BBN, since management does not lend itself to photographs.

A sampling of the many articles on management in various issues of BBN: "Responsible fish consumers can strengthen fisheries management," by Kee-Chai Chong (June-September 1996). "Unresolved and new issues in fisheries management" by Kee-Chai Chong and John Kurien (March 1997). "Reef resources management

in the Maldives" (March 1997 BBN); "Coming together to manage fisheries" by Rathin Roy, a Q & A article on the stakeholder approach to fisheries management (June 1999); "Fisheries and aquatic resources management: lessons not learned yet" by Kee-Chai Chong (September 1999).

The theme of stewardship in coastal zone management inspired a superbly imaginative cover design in the June-September 1996 BBN. Sketches showed how fishermen, tourists, consumers, fisherwomen, administrators, donors and middlemen could together help stewardship. This issue contained an article by 13 authors – a record for BBN. It was on "Regional stewardship for sustainable fisheries and food security." A colourful two-page photo feature highlighted "Issues and solutions in fisheries management" – the BOBP projects in member-countries.

The December 1996 BBN was much acclaimed within and outside the region for its splendid coverage of ornamental fisheries (See page 24). This issue also contained a lovely photo feature on "Income options for women in Bangladesh fishing communities". Another photo feature followed in the March 1997 BBN: by S R Madhu on "Community-based fisheries management in Phang-Nga bay, Thailand".

Shrimp culture was the theme of the September 1998 BBN: articles by M Sakthivel of the Aquaculture Foundation, John Kurien and Charles Angell (who wrote about the plight of shrimp farmers in Andhra Pradesh). There was also a case-study of the CMFRI and an interview with a shrimp exporter. Shrimp was again the focus of a cover package in March 2000. Marine parks of Malaysia were highlighted in the December 1998 BBN.

The March-June 1999 BBN contained a first-of-its-kind report on the visit to Chennai of FAO Director-General Jacques Diouf.



The people behind *Bay of Bengal News*

The following were the main *dramatis personae* behind the 80 issues of BBN from 1979 to 2006.

1. Lars Engvall – the first publisher (1979-1994).
2. S R Madhu – the first editor (1981-1991) & consultant (1996 - till date).
3. E Amalore – the first artist, also an engineer, a draughtsman, a photographer (1981-1994, 1996-2000).
4. Vijay Kumar – video specialist and photographer (1988 - 1992).
5. S Jayaraj – artist, photographer and video cameraman. (1985 - 1994, 2001 to till date).
6. S Muthiah – the second editor (1991-1995).
7. Rathin Roy – extension specialist, regular contributor to BBN (1987-2000).
8. Kee-Chai Chong – publisher-cum-editor (1995-2000).
9. Y S Yadava – publisher-cum-editor (2000-till date).

Nagaraj & Co have printed all issues of *Bay of Bengal News* except those during the third phase of BOBP (1995-2000).

Its managing director M S Nagarajan has been a keen enthusiast of BOBP.



Sri Lankan fishermen on the cover of the March 2001 BBN aroused great interest. Well-attended workshops on the Code of Conduct for Responsible Fisheries held in Chennai (September 2000 BBN), Dhaka (Jan 2002-March 2003 BBN), Malé (September 2004 BBN) and Colombo (December 2005 BBN) generated detailed coverage. Fisheries profiles have been published for east coast states of India, and for Bangladesh, Sri Lanka and Maldives. There have been two reviews of BOBP work (December 2000, January 2002-March 2003, the present issue discusses 25 years of BBN) to summarise the lessons of the past. The tsunami and measures for rehabilitation have been analysed.

Two lovely photo features illustrated the BOBP-IGO's art contests for children on "Life after the tsunami" in Tamil Nadu and Maldives (September 2005) and Sri Lanka (December 2005). The enthusiasm and energy displayed by the children were expected, but the quality of their paintings, and the maturity and thoughtfulness they displayed, was indeed a revelation. A photo feature on Sri Lankan fisheries after the tsunami was another highlight of the December 2005 BBN. The present issue of BBN discusses the work of the CIFE, Mumbai. This is the first of a series of articles on "Know your Institution" about leading fisheries institutions of member-countries.

The subject orientation of BBN has changed, but the passion, the commitment, the striving for excellence goes on.

– S R Madhu

There was also a cover package on the Code of Conduct for Responsible Fisheries, the first of many, with articles by Dr Y S Yadava and John Kurien. The September 1999 BBN reviewed a book by Dr K Sivasubramaniam on 100 years of fisheries management in Sri Lanka. The December 1999 and Jan 2000 issues discussed "Documentation of learnings" from the management phase of BOBP, result of a two-member mission (Gary Preston and Y S Yadava) that reviewed BOBP activities in member-countries.

The first BBN issue under Dr Yadava's editorship, September

2000, discussed a Workshop on the Code of Conduct. The keynote address by Mr N K Sinha, GOI Secretary, was reproduced, along with articles by John Kurien, Sebastian Mathew and Kee-Chai Chong. The December 2000 BBN analysed the management of push net and set bagnet fisheries in Bangladesh.

BBN during the first six years of the new millennium has had an awareness-raising and educational orientation. Safety at sea has been featured several times (March 2001, June-September 2001, December 2005, March 2006). The eye-catching batik painting of

Fishing with shore seine in Sri Lanka





Managing coastal resources: Communities in the Philippines show the way

Many success stories in coastal resources management (CRM) have been reported from the Philippines, with communities taking the lead. In a country of 7 000 islands and a coastline of 17 460 km, sustainable management of coastal resources is vital. The principle of CRM has been institutionalised in laws at the national, provincial and municipal levels (see Boxes 1 & 2 on page 38).

Palawan, the largest province in the Philippines, presents an impressive success story in CRM. It is the Community-based Marine Sanctuary Management and Livelihood Support Project, implemented by the community in Caramay, Roxas municipality.

Palawan is a narrow archipelago of 1 700 islands and islets. It is sandwiched between the South China Sea on the western side and the Sulu Sea on the eastern side. Known the world over as the last ecological frontier in the Philippines, Palawan province is



Grouper farming in cages





Members of the Caramay Producers Cooperative

Box 1: CRM benchmarks in the Philippines

- Multi-Year CRM Plan
- Coastal Resource Assessment
- CRM-Related Organizations
- Annual CRM Programming and Budgeting
- Shoreline/Foreshore Management
- Best CRM Practices being implemented:
 - Local Legislation
 - Municipal Water Delineation
 - Coastal Zoning
 - Upland/Watershed Management
 - Mangrove Management
 - Fisheries Management
 - Solid Waste Management
 - Marine Protected Areas/ Marine Sanctuaries
 - Coastal Law Enforcement
 - Coastal Environment-Friendly Enterprise Development
 - Revenue Generation
 - Multi-Institutional Collaboration for CRM

rich in both terrestrial and marine natural resources. Its coastline stretches almost 2 000 km, indented by numerous coves and bays. Its pristine waters provide some of the best fish varieties and the fish landings (Box 3). In recent years, seaweed and pearl farming have been encouraged – as well as mariculture to prevent depletion of fishery resources.

The Community-based Marine Sanctuary Management and Livelihood Support Project

The Project is supported by UNDP/ GEF/RNE/SGP and implemented by

Box 2: Key players in coastal resources management in the Philippines

National Government

(Central, regional, and provincial offices)
Department of Environmental and Natural Resources (DENR)
Bureau of Fisheries and Aquatic Resources (BFAR)
Department of Interior and Local Government (DILG)
Philippine Coast Guard (PCG)
Philippine National Police (PNG- Maritime)
Philippine Navy (PN)
Regional Development Council

Municipality

Mayor
Vice-Mayor/SB
Municipal Planning and Development Officer (MDPO)
Municipal Agriculture Officer (MAO)
Municipal Environment and Natural Resources Officer (MENRO)
Municipal Coastal Resources Management (CRM) Office
Municipal Fisheries and Aquatic Resources Management Council (FARMC)
Integrated FARMC
Municipal Development Council
Private Sector
NGOs
Academe

Province

Governor
Vice-Governor
Provincial Planning and Development Officer (PPDO)
Provincial Agriculture Officer (PAO)
Provincial Environment and Natural Resources Officer – Local Government Unit (PENRO-LGU)
Provincial CRM office
Provincial Development Council

Barangay (Village/ Township)

Barangay Captain
Barangay Council
Barangay FARMC
Bantay Dagat/Deputized Fish Warden
Fisherfolk Associations
People’s Organization

the *Maliliit Na Maningisda Ng Caramay Producers Cooperative* (MMCPC). It aims to tackle the pressing problem of declining fish yield/ fish catch of marginalized fishermen in Caramay, Roxas, brought about by the destruction of marine resources resulting from illegal fishing, overfishing and the intrusion of commercial fishers into prohibited zones. The project

adopts an inter-sectoral approach with a strong focus on sustainable livelihoods. The six project components: (1) marine sanctuary establishment and improvement (2) mangrove conservation and management, (3) patrolling and law enforcement (4) community strengthening/IEC/advocacy (5) capability-building and (6) livelihood support.

Box 3: Profile of fisheries sector in Palawan

Fishermen and Fishing Boats

Commercial Fisheries

Fishermen	-	3 541
Boats	-	186

Municipal Fisheries

Fishermen	-	66 773
Boats (Total)	-	15 259
Motorized	-	7 780
Non-motorized	-	6 752
Others	-	727

Fish production during 2005 (in metric tonnes)

Commercial fisheries	-	23 142 (1 135 222)
Municipal fisheries	-	1 04 257 (1 132 120)
Aquaculture	-	104 (1 895 793 including seaweeds)
Total fish production	-	1 27 503 (4 163 135)
Seaweed production (Fresh weight)	-	3 53 115

* Figures in parentheses denote total production in the Philippines during 2005

Marine sanctuaries, patrolling and law enforcement:

A 50-hectare area has been delineated for the marine sanctuary with perimeter mooring buoys. The setting up of the sanctuary and regulation of fishing will help regenerate resources and increase fish yields within and outside the sanctuary. Two monitoring stations have been established in strategic areas for monitoring, patrolling and surveillance activities. Patrol boats and communication equipment have been installed and made operational. Four-sanctuary guards/ fish wardens have been appointed for daily monitoring and patrolling.

Mangrove conservation and management

Community-based mangrove rehabilitation and management is being undertaken. Ecological camping by youth is being encouraged. So far 90 000 mangrove seedlings have been planted in a 9-hectare area in Tabuyo, Caramay. The community has taken active part in planting and monitoring. Boy and girl scouts in the Roxas Southern District were active participants. The Local Government Unit and the Bureau of Fisheries and Aquatic Resources assisted in the programme.



Marine sanctuary livelihood support activities

Activities include grouper farming in cages, lobster culture, sea cucumber (Balatan) culture, siganid culture, livestock feed production and fish processing.

Community strengthening, capacity-building and advocacy

Activities carried out include training in fishery law and enforcement, biodiversity conservation, coastal resources management, organisational development and management, cooperative development, financial management, mariculture and livestock feed formulation.

Coastal eco-tourism

The aim is to develop sustainable livelihoods and to conserve biodiversity by enhancing public awareness about coastal resource protection and management. An attractive wide-ranging eco-tourism package of one or two days offered by the cooperative includes:

- Orientation on project activities.
- Island-hopping in Reynard Island, North and South Isle Verde and Puntod Sand Bar.
- A special attraction is the delectable seafood (grilled fishes, steamed lobster and crabs) at the Puntod Sand Bar.
- Balsa rides for snorkeling and swimming.
- Beach walks – particularly the beach between Caramay River and Inindian River, and the beach at Puntod Sand Bar.
- Identification of shells, sea grasses, other marine species in special gleaning areas.
- Guided paddle boating, kayaking, hook and line fishing in multiple use zones.
- Homestay services and socio-cultural interaction with the community.

(This write-up is based on the visit to Palawan by Dr Y S Yadava in July 2006. The visit was part of the International Cooperative Fisheries Organization's Training Project for Promotion of Community-based Fishery Resource Management by Coastal Small-scale Fishers in the Philippines).

Indigenous knowledge in marine fisheries:

“An exciting initiative from the BOBP-IGO”



The BOBP-IGO has initiated studies on Indigenous Knowledge in Marine Fisheries in the member-countries. Here is some basic information about this initiative.

Q: Why should we be interested in indigenous knowledge?

A: Everyone agrees that in the world of development, despite the formidable expertise available today, and the technological wizardry of the 21st century, we have much to learn from the indigenous knowledge that traditional communities have harboured for centuries.

In the Bay of Bengal region, marine fisherfolk hold a rich legacy of indigenous knowledge and traditional wisdom. Many traditional practices are based on sound common sense. They are eco-friendly as well. The FAO's Code of Conduct for Responsible Fisheries also recognises this fact.

Q: So what does the BOBP-IGO intend to do about indigenous knowledge?

A: Quite simply – to research, to learn, to debate, to document, to network. We'll give the process of building a database on traditional knowledge in marine fisheries, the

initiative and the momentum it needs. It will be a partnership effort – with NGOs, UN agencies, other development organisations, and of course the fishers of Bangladesh, India, Maldives and Sri Lanka who are member-countries of the IGO.

Q: What process would be used to document indigenous knowledge?

A: The preparatory efforts will include a two-day “scoping workshop”, the preparation of case-studies and finally a “writeshop” to document the case studies with illustrations.

Q: Can you explain these two terms – the scoping workshop and the writeshop?

A: In the “scoping workshop” some 15 specialists in indigenous knowledge will discuss the scope of the study – the theme, topics and formats for 50 case-studies. They will also identify the researchers who are to prepare the case-studies. They will agree on a ‘prior informed consent’ framework for the study, a mechanism of consent by the

owners of the traditional knowledge, to the dissemination of this knowledge. In the “writeshop” the case-studies will be presented and critiqued. In co-operation with the authors, the editorial team will draft, polish and finalise the case-studies in an easy-to-read quick-to-absorb style. Artists will do illustrations. Discussion summaries and findings will also be prepared and the document will be ready at the end of the “writeshop”.

Q: What exactly will you do after the writeshop, what will come out of your effort, and when?

A: The output will include a publication and a CD-ROM on “Indigenous knowledge in marine fisheries: best practices for fisheries resources management and conservation”, which will be distributed widely within and outside the region. The study will help establish a strong network of IK-in-Fisheries practitioners and researchers. *Bay of Bengal News* will serve as a networking forum, with regular updates, articles and ideas on IK in fisheries. Feedback either direct or through the BOBP-IGO website www.bobpigo.org will improve the knowledge base.

Bay of Bengal News is a quarterly publication of the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO). The BOBP-IGO is a regional fisheries body, which presently covers four countries around the Bay of Bengal – Bangladesh, India, Maldives and Sri Lanka. The BOBP-IGO plays a catalytic and consultative role in developing coastal fisheries management in the Bay of Bengal to help improve the conditions of small-scale fisherfolk in the member-countries.

