Reviving Fisheries after the Tsunami

What has been done to restore and rehabilitate fisheries and fisherfolk communities hit by the tsunami? What are the priorities now? Report of what was said and discussed at a workshop in Mahabalipuram, held on 6-7 February 2006.

The workshop on Post-tsunami Revival of Fisheries Sector and Rehabilitation of Fishing Communities was held in Mahabalipuram on February 6 and 7, 2006, at the same venue as the IFISH 3 conference. Some 46 persons took part, including representatives of fisher communities.

The tsunami was one of the worst tragedies in recent history and left fisher communities shattered, said Dr Yugraj Singh Yadava, Director, BOBP-IGO, in introductory remarks. While the immediate tasks of relief are over, the status of rehabilitation differs in various locales and countries. Livelihood restoration and rebuilding community confidence are two of the major challenges faced by governments and the civil society. He hoped that the workshop, being held in co-operation with the FAO and NIOSH, would prove useful.

Dr George A Conway of the National Institute of Occupational Safety and Health (NIOSH), USA, welcomed representatives of fishing villages near Mahabalipuram to the workshop. He said their first hand experience – both with tsunami devastation and with rehabilitation work — would be valuable. He hailed the success of local governments in preventing the outbreak of disease following the tsunami. There was room for improvement in tackling the psychological trauma of fisher communities after the tsunami. Sanitation and communication were other important issues.

Mr Ari Gudmundsson of the FAO expressed appreciation of the massive post-tsunami relief work undertaken by governments and others. The FAO too had contributed to relief work. The sheer scale of the tragedy was unprecedented, so more needed to be done. He hoped that the workshop would enable constructive debate on major issues.

Mr Ari Gudmundsson speaking at the inaugural session of the Workshop

Mr D P Yadav, Director, Department of Fisheries, Government of Tamil Nadu, said millions of people, mostly fishers, were displaced by the tsunami. The global community had responded splendidly with succour. In Tamil Nadu, local communities themselves coordinated and managed relief materials. He said we are almost back to normal today, but ought to deliberate on major issues raised by the tsunami and formulate new plans. The fishing community is quite amenable to joint planning and implementation. He said that the government has coped with the massive challenges of the tsunami, but the capacities and capabilities of the Department of Fisheries need to be strengthened.

Fisher community representatives present at the workshop were invited to the dais. One of them (P Vasu from the fishermen village, Mammalapuram) spoke about the tsunami and its impact (damaged infrastructure, boats and nets, repairs, health issues both physical and mental, livelihoods), and said the community needed further help.

A seven-minute silent video of tsunami clips, shot and put together by the BOBP-IGO, was shown. The inaugural session ended with a vote of thanks by Dr SS Tabrez Nasar.

Sessions 1 & 2: Post-tsunami revival of the fisheries sector and rehabilitation of fishing communities.

Mr Ari Gudmundsson moderated the first session, which featured three speakers – from Sri Lanka, Thailand and the Maldives.

In a comprehensive presentation, **Mr H S G Fernando,** Director (Ocean Resources) in the Ministry of Fisheries and Aquatic Resources,

detailed the damage of the tsunami: it had affected 12 of the 14 coastal districts in Sri Lanka, killed 4 870 fishers and damaged nearly 17 000 houses. Ten out of 12 harbours, 37 anchorages and 200 fish landing centers were badly damaged.

The reconstruction policy aimed at "building back better," at rehabilitating fishing communities and restoring the fishing industry so that they were better than they were before the tsunami. Major projects under implementation were fisheries harbours at Panadura, Beruwala and Kudawella (with Chinese assistance), Tangalle and Galle (Japan), Mirissa, Puranwella and Hikkaduwa (USAID), ice plants, fish transport vehicles and cold storages (Japan). Selected anchorages would be improved with UNDP assistance funded by Japan, the Tangalle fisheries training center would be helped by Italy, and coast protection structures would come up with ADB assistance.

An FAO fisheries programme for recovery and rehabilitation, with funding support from several countries, covered many areas – fishing fleet, regulations on safety standards, infrastructure development plans, livelihood support. IFAD, GEF and ADB were assisting three major projects – relating to coastal rehabilitation, livelihoods, coastal zone restoration in the Eastern Province, and two fishery harbours.

Mr Bundit Chokesanguan of SEAFDEC's training department said the tsunami had affected six provinces of Thailand, killed nearly 5 400 persons, destroyed nearly 7 000 housing units, and inflicted damage on agriculture, coral reefs, mangroves and aquaculture. A government relief fund with a budget of 1.3 billion baht had been set up to provide compensation and to help fisheries and fisher communities. Under a proposed fisheries rehabilitation plan, fishing surveys would be carried out in several villages and a livelihoods workshop would be organised.

Mr Ali Majid from the Ministry of Fisheries, Agriculture and Marine Resources in the Maldives said the tsunami had killed 82 people in his country, deprived 1 600 people of livelihoods, and inflicted damage worth about US $ 25 million. The government's long-term policy was to leave everyone better off than they were before the tsunami. Support and technical assistance were being provided by Japan, the FAO, UNDP, World Bank, IFAD and Australia.

Under various elements of a fishing vessel replacement programme, damaged vessels would be repaired, new long-range vessels would be introduced, fishing gear, engine and equipment would be repaired or replaced. Through other programmes, boatsheds would be rehabilitated, fish processors would be provided with micro-credit, a Fish Aggregating Device Centre would be repaired, a mariculture station would be restored. Support would be provided for infrastructure (fish markets, chill containers, ice plants). Reef and marine resources would be assessed.

Some of the issues that confronted the authorities were lack of coordination between different agencies, delays in finalising implementation, with different donors expecting different arrangements, problems in finalising beneficiaries.

Mr D P Yadav, Director of Fisheries, Tamil Nadu, described relief and rehabilitation in his state. (See article on pages 30-32) Among policy interventions for tsunami rehabilitation, he cited the development of advanced warning systems for natural calamities, insurance coverage, setting up of shelterbelt plantations, modernisation of infrastructure, conversion of wooden kattumarams to FRP, training coastal communities in alternative livelihoods, diversification of the coastal economy.

Speakers, clock-wise from left: Mr D P Yadav, Dr Chandrika Sharma, Mr R Devan, Mr Ali Majid

He mentioned some key issues to be addressed: community-based fishery resource management, strengthening of co-operative institutions in fisheries, enhancing the capacities of the Department of Fisheries, strengthening of its engineering wing, development of a domestic market for fishery products, improvement of market intelligence.

Dr N K Kittusamy of the Spokane Research Laboratory in NIOSH, described a rapid needs assessment of health care facilities in Banda Aceh, Indonesia, the country worst hit by the tsunami. Dr Kittusamy was part of an 11-member team that conducted two surveys to assess the damage to six hospitals and a health office. The type of damage varied. One hospital was under four feet of water, mud and debris. Most of the equipment had been destroyed; some buildings needed extensive repairs. The police was running another hospital with some support from Australia. There was no water service. The health office had come under eight feet of water and the buildings needed major repair. The main general finding of the survey was that most of the facilities were suitable for occupancy after clean up and repair.

Ms Chandrika Sharma of the International Cooperative in Support of Fishworkers (ICSF) presented a list of rehabilitation priorities "from a small-scale fisheries perspective" on the basis of ICSF studies in Indonesia, Sri Lanka, Thailand and India. Some of these priorities:

- A broad coastal development approach should be adopted to improve the quality of life of coastal communities.
- Mechanisms should be set up to maintain and assess public utilities provided by donors and NGOs as part of tsunami relief. Transparent mechanisms should be set up to register complaints about the quality of tsunami rehabilitation assistance. Coordination mechanisms should be strengthened.
- Issues hindering completion of permanent housing should be resolved. If communities relocate, the rights to vacated lands should remain with them. Housing sites for fishery-dependent communities should be located at a convenient distance from areas where they store fishing equipment, access fishing grounds or dry fish.
- Coastal habitats and biodiversity should be protected and restored, and these should not be confined to tsunami-affected areas.
- Further construction of small-scale vessels must be undertaken only after clear evidence of a shortfall in replacing vessels in a particular region.
- Only fishing gear that's appropriate and selective and compatible with the status of fishery resources should be distributed under tsunami rehabilitation.
- Brackishwater aquaculture and mariculture should be promoted as employment alternatives in tsunami-affected areas only after addressing environmental and sustainability concerns.
- Systems for effective registration of craft, gear and engines should be established to streamline post-tsunami rehabilitation. Participatory programmes should be taken up to strengthen management regimes to conserve fishery resources.
- Fishers should be imparted training in basic safety in accordance with revised FAO/IMO/ILO guidelines.

Tsunami workshop in progress

A tsunami memorial in Sri Lanka

- Post-harvest programmes should promote labour-intensive low-cost and locally appropriate technologies. Any cold chains ought to benefit and not displace small-scale processors and traders.
- Vessel and crew insurance should be made mandatory at affordable premia.
- A periodic census of men and women engaged in fishing should be undertaken to facilitate remedial action during natural calamities.
- Women engaged in fisheries operations should be recognised as workers in their own right. Tsunami rehabilitation programmes should aim at improving women's livelihoods, work conditions, resource access and social security.

Group discussions followed the two presentation sessions. A sampling of comments and viewpoints:

- In Sri Lanka, resource assessment for marine fish stocks is being planned in co-operation with Norway. Right now fishers who go deep-sea fishing run into problems with their boats.
- In Tamil Nadu, the heavy rains during the monsoon of 2005 aggravated the problems of tsunami rehabilitation.
- The National Bank for Agriculture and Rural Development (NABARD) has extended loans to fishermen at a very low rate of 4.5 percent. It is imperative that these loans get repaid, so that banks can extend loans to others in need. Where fisheries infrastructure is being created, a fee should be collected from fishermen who benefit.
- More boats do not automatically mean over-exploitation, because they also lead to crew shortage, and the boats may lie idle. Boat registration is a problem in small-scale fisheries. Non-registration hampers proper damage assessment.
- On regulations for boat construction Mr Ari Gudmundsson said that the FAO has helped with fishing craft technology in three countries. But small-scale craft are being built here on the basis of price rather than standards. Regulations for FRP construction are not being followed. Mr Mats Rosander-Liew said regulations for boat construction in Sweden are accepted and followed. But a lot of work was done before regulations came to be accepted.
- For FRP boats in Sri Lanka skilled labour is unavailable. Regulations for construction and equipment exist only on paper. Training and skill upgradation of workers is needed.
- In the Maldives, the government is engaging to some extent in vessel construction as well (besides financial and technical support) as part of tsunami rehabilitation effort.
- Database formats should be locality-specific or at least region-specific. Simple procedures of data collection should be designed, since cost is a factor. Data was not available when tsunami relief work started. Now that it has been created, there are issues of ownership and access. Data should be decentralized.
- Information sharing on calamities is vital not merely within countries but between countries as well.

Workshop participants made a field trip to a fishing village in Mahabalipuram

The workshop participants then divided themselves into three groups to discuss three aspects of tsunami rehabilitation. Each group presented its findings.

Group 1 (fishing boat construction norms and guidelines):

The issue of FRP boat construction was discussed at length. The group made a field trip to a landing center nearby and observed many FRP boats anchored at the beach. It was suggested that the FAO's guidelines for FRP boat construction and repair in the Maldives be disseminated online, so that India and other countries could use them. The FAO can strengthen the process of dissemination if funds are made available.

Just as vehicles must conform to certain standards before they are considered roadworthy, boats must not take to the water or go beyond a certain range unless they are seaworthy.

In Sri Lanka, the NGO Secretariat of the Department of Fisheries meets every month, and would be the right forum for field progress on this subject. Some NGOs are buying back defective boats. It was pointed out that fewer accidents would take place at sea if vacant space in boats was not filled with foam.

In Tamil Nadu, concern has been expressed by many about the quality of boats constructed and distributed after the tsunami. It was suggested that the tsunami reconstruction center in Tamil Nadu – which coordinates with NGOs, some of which are active in remote areas as well – should get across the vital message of seaworthiness. So should the Department of Fisheries.

Group II dealt with fishing capacity. Some of the suggestions made:

Fishers should include spare fuel in their boats, learn how to carry out basic repairs for simple accidents at sea, use appropriate fishing gear, develop a proper life jacket (manufacturers could make life jackets on the basis of what fishermen wanted), clean the boat after every operation.

Group III dealt with policies and regulations. It discussed three issues – strengthening the information base, regulating fishing capacity, and improving the disaster preparedness of fishing communities.

Group members agreed on the paucity of the right data. Sometimes it is available but not accessible. Information needs to be developed on fisheries resources, fishing craft, infrastructure and stakeholders. A time frame must be set for collection and compilation of data. Information access should be streamlined as well, and a mechanism for information sharing on a regional basis worked out.

On regulation of fishing capacity, a clear picture on resource availability must be obtained, particularly in coastal waters. But as a precautionary approach, access to small-scale fisheries must be regulated right away, with the participation of fishermen. Fishing capacity must be frozen at the present level.

On community disaster preparedness, a reliable early-warning system against storms and cyclones is vital. So are education and training of fishers on disaster preparedness. Various options for communication equipment at sea were discussed, and a proper cost-benefit analysis was suggested. Low-cost waterproof mobile phones could be very useful, they could be used to communicate with other fishermen as well, but the Maldives representative said these are not reliable. He advocated VHF sets which can reach fishermen in the deep sea.

Dr V S Sadamate, Advisor (Agriculture), Planning Commission, Government of India, congratulated the organisers of the Tsunami workshop. The Planning Commission would look closely at the conclusions of the workshop and IFISH 3, which concluded a couple of days earlier, he said. The 11th Five-Year Plan will commerce soon, and inputs from these two events will help the Government.

Mr Ari Gudmandsson said the tsunami must have been one of the most debated topics of 2005. It had grabbed global attention in a way that had never happened in recent memory. The Mahabalipuram workshop took up issues not discussed in detail at other workshops, and had therefore proved useful. Dr Yadava hailed the inputs generated at the workshop, which he described as most rewarding.

Participants at the Tsunami workshop