



CONSRN POLICY BRIEF NO.1

Rebuilding boats may not equal rebuilding livelihoods

This brief on post-tsunami rehabilitation was developed by the WorldFish Center. It is one of a series of policy briefs being developed by CONSRN (Consortium to Restore Shattered Livelihoods in Tsunami-Devastated Nations) to assist in the rehabilitation efforts following the 26 December 2004 tsunami. The brief was developed under the auspices of CONSRN but does not imply endorsement by all agencies.

Indonesian rural coastal communities are highly dependent on coastal fisheries resources for food security and livelihoods with many of the people working as small-scale fishers, using low-technology gear and small powered and un-powered vessels. These people were among the hardest hit by the December 26th tsunami. The death toll in the sector was enormous; in Aceh province more than 10% of fishers (9083) lost their lives, while on Nias Island, a further 15-20% perished¹. Impacts on fishing capacity and infrastructure were also profound; in Aceh Province, for example, 83 fish landing facilities and 20 ice plants have been destroyed, along with about 40% of the small-scale fishing fleet and associated gear². The Indonesian Government estimates damages to the capture fisheries sector at Rp 478 billion (US\$ 52 million).

In the wake of the tragedy, government agencies and other actors seeking to provide relief and to rehabilitate affected communities are struggling to cope. The large number of actors involved, the volume of funds flowing and the difficulty of ensuring that all assistance is delivered within agreed government co-ordination structures is making the task of rehabilitation a significant challenge. Armed with good intentions and awash with money, but without clear co-ordination and a coherent strategy many of the rehabilitation efforts will fail. Worse still, they may imperil the longer term livelihoods of the communities they are seeking to help.

For fishers, the grim possibility that efforts to rebuild might actually send their communities on a downward path to

¹ FAO Rapid Assessment April 2005.

² idem

economic misery is very real. The reason for such pessimism lies in the fact that all evidence points to coastal fisheries resources in Indonesia being over-fished and severely depleted. Admittedly, data on fish stocks for the areas most affected by the tsunami are lacking (and badly needed), but trends in neighboring areas tell a sad story that almost certainly applies.

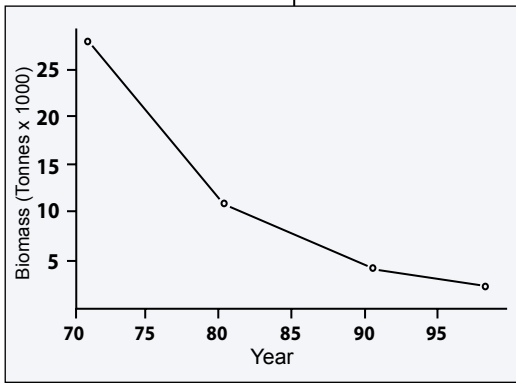


Figure 1. Trend in demersal fish biomass for W. Coast Peninsula Malaysia. (Source: Abu Talib, A., Isa, M.M., Ismail, M.S. and S. Yusof. 2003. Status of demersal fishery resources in Malaysia. In: Assessment, Management and Future Directions for Coastal Fisheries in Asian Countries (Silvestre et al., eds). WorldFish Center Conference Proceedings 67, 83-137).

Figure 1, for example, shows trends in the overall biomass of demersal³ fish in the Straits of Malacca off the West Coast of Peninsula Malaysia at depths to 50 m. By 1997 fish biomass had declined to 11% of that present at the beginning of the 1970's.

A similar trend is found for deeper waters of the Straits, for Indonesian fisheries in the Java Sea, where data are better, and for most of the coastal fisheries of S.E. Asia. Considering the similarities in the ecosystems, the resources, the fisheries, the markets, and the types of governance between these areas and those around Banda Aceh, it is highly likely that the pre-tsunami situation was identical, with significant overcapacity and overfishing.

Clearly, the long-term sustainability of coastal fisheries resources is a pre-requisite for the economic well-being of fishing communities. This need has been recognized by governments and has been well articulated by the 2005 Rome Declaration on Fisheries and the Tsunami⁴, which, among other things states that:

- Rehabilitation efforts should be consistent with the principles of the FAO Code of Conduct for Responsible Fisheries⁵; and
- The fishing capacity that is being rebuilt should be commensurate with the productive capacity of the fisheries resources and their sustainable utilization.

In its own national strategy paper for the rehabilitation and reconstruction of the fishery sector⁶, Indonesia has also recognized this need:

- One of the key guiding principles is to “Consider environmental sustainability throughout... through fisheries management tools prevent overfishing.”
- The strategy objectives include: “To ensure that the initial activities will NOT negatively impact the realization of sustainable fisheries”.

Given the likely depletion of fish stocks in the tsunami affected areas, what is certain is that these conditions cannot be met by simply returning fishing capacity to the pre-tsunami state, allowing stocks to continue on their downward spiral and condemning fishers to become even more vulnerable. Yet there is a very real risk that this will happen if our rehabilitation response is developed without due thought given to the complexities involved and is dominated by easy and ill-considered options for replacing lost boats and gear. It would be a dangerous over-simplification, for example, to argue that with the death of such a high proportion of fishers, providing boats and gear to those that remain presents no risk to the sustainability of stocks or to the longer-term livelihoods of fishers. The following factors argue against such a view:

1. The catching power of new boats and fishing gear is likely to be higher than those they replaced;
2. When other livelihood options are unavailable new entrants into the fishery can be expected. Entry of new participants may even be facilitated by the availability of new boats and gear or else lead to the resumption of destructive fishing practices;
3. Widespread damage to coastal habitats such as mangroves (and deforestation to support rebuilding efforts) may affect the sustainability of key fisheries resources;

³ Fish that are associated with the seabed, rather than pelagic fish that inhabit mid-water.

⁴ Adopted by the FAO Ministerial Meeting on Fisheries, Rome, 12 March 2005.

⁵ The FAO Code of Conduct for Responsible Fisheries sets out principles and international standards of behavior for responsible practices with a view to ensuring the effective conservation, management and development of living aquatic resources.

⁶ Strategy and Program for Rehabilitation and Reconstruction of the Fishery Sector in Aceh and Nias Post Earthquake and Tsunami Wave Disaster. Ministry of Marine Affairs and Fisheries, Indonesia.

4. History shows us that the continuation of open-access fishery regimes for these coastal communities will lead to an inexorable decline in resources and opportunity.

expenditure of donor funds must be re-examined and more coherently targeted to secure a long-term future for the affected communities. Above all, long-term vision must guide short-term rehabilitation. ☹️

To mitigate these factors, co-ordinated action is needed now and the priorities for

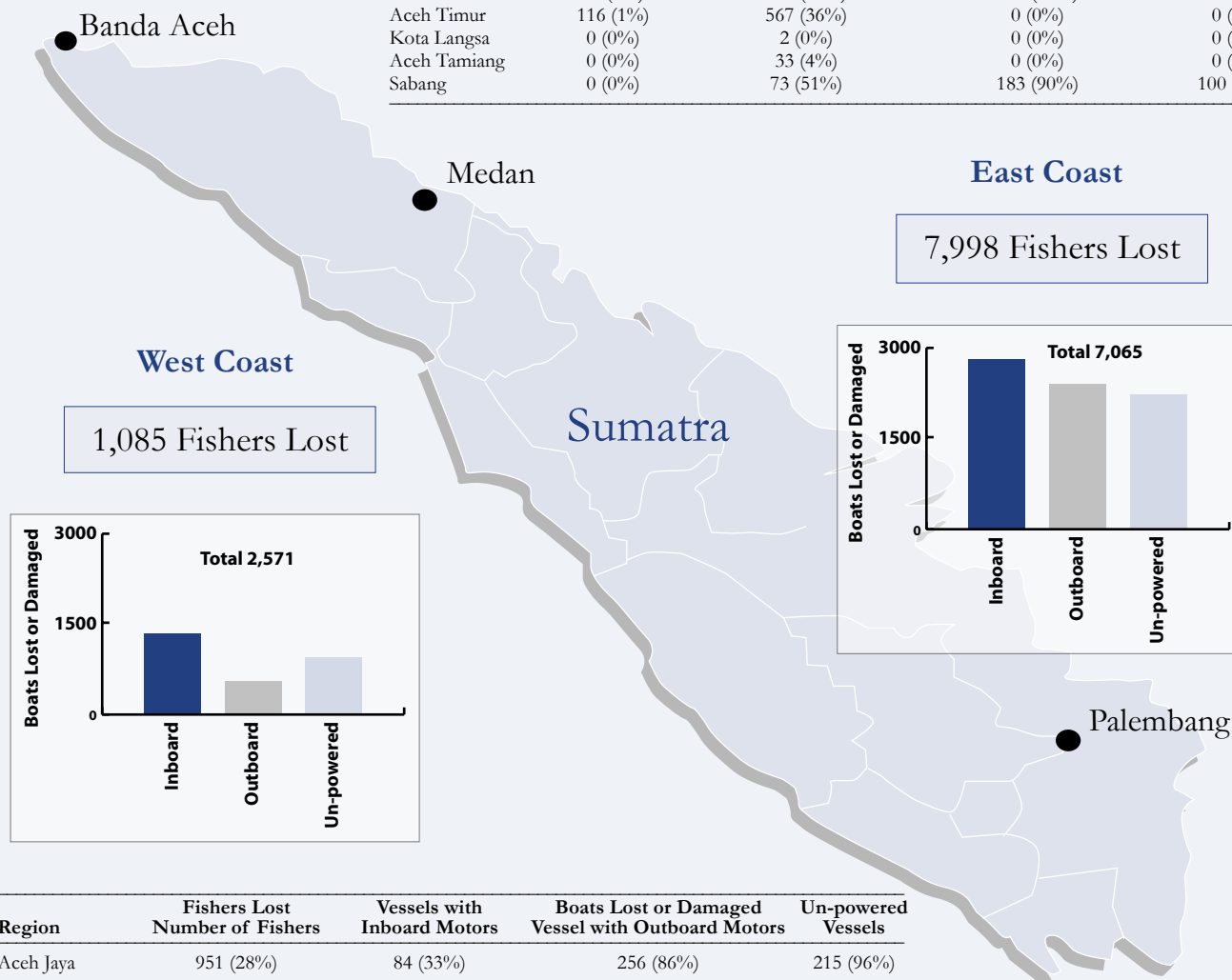
Recommendations

To address the issues outlined above, adoption of the following principles and actions is urged upon all parties with an interest in the rehabilitation efforts:

1. The Government of Indonesia is obviously the coordinating focal point for all rehabilitation efforts and should co-ordinate and guide all actors offering help to fishing communities. Technical assistance capacity and expertise in fisheries matters is also available from FAO, which has been appointed technical lead agency for fisheries rehabilitation, and partner agencies such as the WorldFish Center. FAO is assisting the government to establish policies which articulate the nature and scale of needs in order to allow donor agencies to re-prioritize resources according to these policies. Further support and guidance should be provided, as required, at national, regional and provincial levels. Where capacity and expertise in fisheries matters is limited we call on donor agencies to re-prioritize resources to help meet these requirements.
2. All NGO's and other actors involved in the provision of support to fishing communities should a) provide accurate and up-to-date information to the government co-ordinating authority on their intentions b) seek guidance on the nature of the support that is needed and c) obtain clearance from that authority before proceeding. If necessary, donor agencies should be prepared to abandon plans to provide assistance (e.g. boats and fishing gear) that is deemed not to be in the longer term interests of fishing communities.
3. All actors should give much greater consideration to supporting the less sensational, but fundamentally more useful activities that are needed for successful long-term rehabilitation. In particular, support is needed to put into the field technical expertise on the livelihoods and sustainability aspects of small-scale fisheries and other sectors. This expertise is badly needed to help make informed assessments of realistic long-term livelihood options, to help guide investment choices and to ensure that the community derived approaches and solutions that are needed are based on realistic assessments of what the fisheries resources and natural and human environment can support.
4. Specific actions that need to be taken immediately include:
 - a. Involve the impacted communities in the development of tsunami rehabilitation plans that take into consideration the sustainable use of the fishery resources. The process should also consider the employment opportunities to be developed as alternatives to fishing, as required by capacity-control plans.
 - b. Investigate the costs, constraints and benefits of a national vessel registration system to ensure that the fishing capacity is monitored and controlled appropriately.
 - c. Based on available science, establish a ceiling on the overall number of vessels that can operate in each region, with maximum numbers set for each category of vessel based on their catching power.
 - d. Enforce, through fisheries co-management, the existing legislation which bans the introduction and use of certain types of fishing gear types. ☹️

The impact of the tsunami on fishers and their vessels in Aceh Province.

Region	Fishers Lost Number of Fishers	Vessels with Inboard Motors	Boats Lost or Damaged Vessel with Outboard Motors	Un-powered Vessels
Banda Aceh	1,271 (83%)	180 (67%)	88 (96%)	50 (100%)
Aceh Besar	3,889 (33%)	313 (92%)	325 (66%)	692 (88%)
Pidie	2,566 (33%)	178 (37%)	648 (89%)	495 (59%)
Biruen	113 (1%)	651 (90%)	374 (61%)	378 (44%)
Aceh Utara	0 (0%)	492 (54%)	283 (62%)	177 (46%)
Lhokseumawe	43 (2%)	160 (94%)	391 (94%)	232 (92%)
Aceh Timur	116 (1%)	567 (36%)	0 (0%)	0 (0%)
Kota Langsa	0 (0%)	2 (0%)	0 (0%)	0 (0%)
Aceh Tamiang	0 (0%)	33 (4%)	0 (0%)	0 (0%)
Sabang	0 (0%)	73 (51%)	183 (90%)	100 (74%)



Region	Fishers Lost Number of Fishers	Vessels with Inboard Motors	Boats Lost or Damaged Vessel with Outboard Motors	Un-powered Vessels
Aceh Jaya	951 (28%)	84 (33%)	256 (86%)	215 (96%)
Aceh Barat	93 (2%)	453 (88%)	2 (8%)	82 (42%)
Nagan Raya	37 (3%)	156 (97%)	124 (91%)	230 (88%)
Aceh Barat Daya	0 (0%)	94 (55%)	9 (6%)	14 (2%)
Aceh Selatan	0 (0%)	197 (41%)	97 (15%)	115 (9%)
Aceh Singkil	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Simeulu	4 (0.1%)	443 (26%)	0 (0%)	403 (19%)

The members of CONSRN include the following organizations:



Asia Pacific Fishery Commission (APFIC)



Bay of Bengal Programme - Intergovernmental Organization (BOBP-IGO)



Food and Agriculture Organization of the United Nations (FAO) through its Regional Office for Asia and the Pacific (RAP)



Network of Aquaculture Centers in Asia-Pacific (NACA)



Southeast Asian Fisheries Development Centers (SEAFDEC)



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