## ESTABLISHING THE IMPORTANCE OF SMALL-SCALE FISHERIES: The Need for Interdisciplinary Research

Chandrika Sharma
Executive Secretary, International Collective in Support of Fishworkers (ICSF) icsf@icsf.net

Daniel Pauly starts by identifying the marginalisation of small-scale fisheries relative to industrial fisheries, especially in developing countries, as a major trend, and concludes by stressing a vision of 'vibrant small-scale fisheries contributing to coastal communities and supplying, throughout the world, the bulk of fish for human consumption, harvested with a minimum expenditure of energy, in a sustainable fashion'. A vision, he says, that could become a reality once the small-scale sector is freed from the constraints under which it presently operates.

One cannot but support such a vision. While there are, no doubt, multiple constraints facing the small-scale sector, Pauly focuses mainly on resource-related constraints -- those that contribute to overfishing and unsustainable use of resources. He refers to, among others, the in-migration into the sector; the breakdown of traditional governance agreements and the subsequent problem of too many fishers and too much pressure on the resource base; industrial fisheries, particularly when fishing in inshore waters; the targeting of export markets by the small-scale and the related weakening of existing institutions; and so on.

It is worth noting, though, that activities outside the fisheries sector that affect the health and productivity of the fisheries resource base, often in highly damaging ways, have not been referred to in any explicit way. Reports from fishworker organisations throughout the world indicate the increasing extent to which pollution and habitat degradation from land and sea-based activities, other than fisheries, are affecting the livelihoods of small-scale fishworkers. These factors are not reflected in the model proposed by Pauly. In fact, many of the elements proposed in the model do not find resonance with issues and trends currently being highlighted by fishworker organisations and those working to support them.

It is also not difficult to identify numerous situations where several of the assumptions in the proposed model do not hold, or where other issues, not reflected in the model are, in fact, more important. This raises important issues about the value of such generalisable models, pointing rather to the need for context specificity. For example, while the causal relationship posed in the model between in-migration into the sector, breakdown of governance arrangements, too many fishers and overfishing may be true in some situations, it may not in others. An increase in the number of fishers and boats may or may not translate into overfishing, depending on the gear being used, the level of technology available, the nature of demand and market linkages, the stocks -- pelagic or demersal -- being targeted, etcetera. These factors need to be taken into account, as policy proposals may vary substantially -- from recommending the exit of fishers from the fishery, to recommending the status quo as long as the level of technology or pressure on the resource does not substantially increase.

C. Sharma. Establishing the Importance of Small-Scale Fisheries: The Need for Interdisciplinary Research. MAST 2006, 4(2):43-45

Perhaps a really weak link in the model is the way women's work has been hypothesised. It is highlighted that women, by taking up jobs outside the sector, in effect, subsidise the continuance of their men in fishing, even after it becomes uneconomic. While this may be observed in certain limited situations, a different trend has been stressed by women in fishworker organisations. They emphasise, rather, the importance of women's productive roles within the sector and the organic link between the harvest and post-harvest sector, relating this to issues of resource sustainability. They have pointed out that as fishing operations become more capital-intensive, export-oriented and centralised, women of fishing communities are often displaced from their earlier roles of processing and marketing fish, or at least find themselves at the lower end of the profit chain, handling lowvalue fish with lower profit margins, or as wage labourers. This also means that even as middlemen, exporters, and merchants corner larger shares of the returns from the industry, the income coming back to the community declines. This has obvious repercussions for the quality of life within communities and access to education and health services that, in turn, make it difficult to acquire skills and opportunities to diversify from the sector, if and when needed. The link between poor quality of life and higher population growth, partly stemming from the need for more hands to feed more mouths, has also been much discussed.

Clearly, the policy implications flowing from a better recognition of the trends highlighted above would be very different. Thus, while the proposals for post-tsunami rehabilitation made by Pauly relate mainly to fishing, organisations of small-scale fishworkers and those supporting them, in a statement to the Food and Agriculture Organisation's Committee on Fisheries (COFI) in March 2005, recommended that:

'strategies for the rehabilitation of the post-harvest sector, a sector that provides a significant source of livelihood for women of fishing communities, should emphasise the use and dissemination of employment-intensive, locally appropriate, low-cost and hygienic technologies'.<sup>1</sup>

The paper also questions the role -- or, rather, the lack of it -- that social scientists, including anthropologists, have played in influencing fisheries management policies, as compared to fisheries economists and biologists. It makes the case that the social sciences, by almost celebrating the complexities and uniqueness of communities, have been unable to draw out these insights to more 'generalisable' levels through policy proposals, preferred by the political class, to support small-scale fisheries.

In the first place, it is not very clear why the weight of responsibility for making policy proposals supporting small-scale fisheries should fall primarily to the social sciences. Pauly, a fisheries biologist, for example, points out that small-scale fisheries meet most of the criteria required for an enlightened fisheries policy in terms of employment and income distribution, energy intensity, product quality and distribution, and sustainability. If indeed the small-scale sector needs to be defended from a biological/ecological perspective, it is as much the role of fisheries biologists, concerned with the sustainability of ecosystems, to conclusively establish this and to offer appropriate policy proposals supporting small-scale fisheries. Similarly, if small-scale fisheries are known to play such an important role in providing employment, income and food security to diversified

and remotely located rural populations, why have economists not been effective in supporting their case with data and analysis? Why have economists not been able to undertake enough work that supports Pauly's assertion that 'emphasis on foreign exchange gain, while music to the ears of most local politicians, is not necessarily leading to economic development'?

The problem, rather, seems to be that those convinced of the essential soundness of the small-scale model of fisheries development -- whether social scientists, biologists or economists -- have been unable to join forces across disciplinary boundaries, to sufficiently challenge the 'mainstream' view that has influenced fisheries management policies. The goals of fisheries development have thus largely been economic -- seeking efficient technologies for higher production and higher revenues, as reflected in gross domestic product (GDP) figures, with the expectation -- largely misguided -- that with such development, social goals will be addressed.

Supporters of the small-scale model, irrespective of disciplines, have been unable to ensure due recognition to the value and importance of biodiversity, of diversified and sustainable livelihoods which current GDP calculations may or may not capture, and of women's labour, much of which does not figure in GDP calculations but which is fundamental to the survival of societies and communities.

If anything, what is needed is good, interdisciplinary, context-specific research that goes towards building a political consensus on the need to promote sustainable and equitable small-scale fisheries. And, as Pauly rightly points out, it is as important for researchers to recognise the dynamism, change, and increasing differentiation within the small-scale sector itself. The sector today, given technological and other changes, can, if not well regulated, negatively impact the resource base. The changes within the sector also mean that it can today target resources that could earlier only be targeted by the industrial/mechanised fleet. To the extent that this development contributes to harvesting resources in more sustainable ways, while providing greater employment within fishing communities, it would need to be supported.

## Notes

<sup>&</sup>lt;sup>1</sup> See: www.icsf.net/jsp/english/stmt\_area/statements\_icsf/1118126622515\*\*\*cofi.pdf. Access date: 10-5-06