Sustaining Fish as a Food Supply

Tim Fischer

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These proceedings record the contributions to another thought-provoking ATSE Crawford Fund annual conference that informed us of the opportunities for international agricultural research to reduce poverty, enhance regional security and improve the natural resource base for fisheries and agriculture in developing countries and Australia.

Fish play a vital role in the livelihoods of the poor, particularly those who live in the small coastal villages and towns in Asia and the Pacific, but also those who live along the great rivers and lakes of Africa. Fish and other marine creatures provide a source of food and cash income, and frequently women are major beneficiaries of this activity.

Two or three decades ago it was thought that the marine resources of the oceans of the world were almost limitless and would make a major contribution to filling the dietary protein gap left by terrestrial agriculture. Now, as the wild fisheries of the globe are serially depleted and aquaculture is producing its own set of problems, we know that is not the case. Several of the world’s great fisheries have either collapsed or are in a parlous state, and fish poaching, with its problems, is exacerbating the difficulties of achieving global sustainability.

Nevertheless, despite over-exploitation in some locations, there are good indications that we are in a position where a sustainable long-term outcome is achievable — provided we can adequately answer scientific questions that are being posed, and fully understand the impact of the policies that need to be put in place and properly managed.

There are competing demands for fish as a source of human food. We are firstly competing with the natural food chains in the oceans and other aquatic environments, but we are also competing with those who need fish as an ingredient of animal (livestock and aquaculture) feed, recreational fishers who enjoy the resource for recreation and sport, and to a much lesser extent those who take fish for display in public and private aquariums.

There is a need to identify the nature and extent of this competition for the resource, and to explore ways by which competition can be minimised through either technological innovations or policy development. We also need to understand the impacts of the technological or policy ‘fixes’.

How do we prevent overexploitation of our wild fisheries? What role can marketing play? Is aquaculture a sustainable solution, or the start of an even bigger problem? What are the costs of the environmental impacts of aquaculture? Are they too high to pay? Can we successfully control diseases in intensive fish-production systems? Can global poaching of the resource be controlled? Can we protect the resource without further harming the livelihoods of some of the poorest of the poor — artisanal coastal fishers?

These are some of the issues explored in the following pages, and this is where international agricultural research has a key role to play. Our objective is to alert Australia’s politicians, fishers and the wider public to the key role of fisheries in poverty alleviation and food security for the world’s poor and hungry, how they can contribute...
to health and human well-being, and the opportuni-
ties and issues for Australia.

Internationally, Australia has a high reputation for
its management of fishery resources — our man-
agement of the Great Barrier Reef is recognised by
the international community as a model for others
to follow. We have produced fishery experts who
have made a substantial impact on the interna-
tional research, policy and development scenes in
fisheries, and several of them participated in this
conference.

We recognise that the world’s fisheries provide
plenty of room for vigorous debate and conflicting
opinions, but we aimed to provide an even-handed
and balanced discussion of the issues and impacts.
Our contributors came with a wide range of views
and backgrounds to provide authoritative com-
ments. We hope that you will enjoy the insights
they provide, and that you will contribute to the
ongoing debate.

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