

International Partnerships for Sustainable Futures for the People and the Sea – from Knowledge to Action

Cornelia E. Nauen

European Commission, Directorate General for Research

INTRODUCTION

When listening to John Kurien's keynote address at the MARE Conference, his thoughtful, sometimes passionate, words elicited a number of mixed thoughts in my mind. Some elements of his historical perspective provide useful guidance for addressing serious gaps in the way conventional fisheries science and economics have concerned themselves with the issues of sustainable futures for the people and the sea. At the same time, the defensive nature of the overall framework with its predominance of a 'donor-recipient' perspective is too limiting for the challenge at hand. That notwithstanding, it certainly had great merit in making us all think about how we want to structure our relationships in the future and what may be suitable approaches to study some of the highly pertinent questions he raised in order to provide direction for future lines of research.

THERE IS ONLY ONE WORLD

The relations between human societies, the ocean and fisheries reach back into the early days of recorded history. Collet (1991) has been among those laying the foundations for rigorous study of maritime civilisations with a demonstration that earlier classifications and analytical frameworks may have overlooked or misinterpreted essential features of their characteristics and dynamics. Today's dichotomy between 'northern' approaches to fisheries putting emphasis on technology and efficiency and 'southern' approaches favouring labour and less capital-intensive production may have more to do with the relative abundance of production factors steering historical pathways than with an *a priori* multiplication of 'worlds' on the only planet humankind has at its disposal – at least so long as space exploration has not generated realistic alternatives. Both capital-intensive and labour-intensive exploitation strategies have managed to deplete the natural resource base on which their future wellbeing depends, as for example Pauly *et al.* (1998) showed with their analysis of the global 'fishing down marine food webs'. Moreover, between one fourth and one third of all primary production have been estimated as already necessary to support fisheries on continental shelves (compared to earlier global estimates of only 2 percent), where industrial and small-scale fisheries are concentrated in temperate and tropical oceans (Pauly and Christensen 1995).

Intensified by the up-scaling of international trade, exchange and interdependence between societies is greatly increased today, this should be taken as an argument for enhanced co-operation within and between societies, not as an autom-

atism for antagonism. This is not to diminish real differences in approach born out of cultural, socio-economic, environmental and climatic conditions. Plurality of conditions warrant differentiated analysis and response, but analysis in separated 'world' frameworks underestimates their interconnectedness and may distract from the need to co-operate more in the future.

PARTNERSHIPS BETWEEN EQUALS

Likewise, the strong emphasis on relations governed by donor-recipient style perceptions and behavioural patterns focuses the outlook onto differences of financial resources instead of sufficiently highlighting the wealth of accumulated knowledge in age-old cultures in different parts of the world. Insisting on boundaries instead of on commonalities does little to promote comparisons and joint learning, which broadens the cognitive base (Sen 2000) and can build the trust necessary to open new perspectives and options towards sustainable futures for all human societies.

Such a perspective goes well beyond transfers, whether technological or financial. Indeed, as early as 1979, in the occasion of the UN Conference for Science and Technology for Development, developing country representatives objected to simple transfers, which are never neutral to any given context, and instead demanded scientific cooperation on equal footing. In response, the European Commission established, as of 1983, a programme for science and technology for development. During the 20 years of its existence and evolution, it has mobilised thousands of teams from developing partner countries and the European Union, based on voluntary cooperation among scientific institutions, mutual respect, shared benefits and responsibility. Funding decisions are taken after competitive peer review by scientists from around the world and subsequent assessment, by developing country science managers, of the best scientific proposals for relevance for promoting sustainable development.

Successive editions of this international scientific cooperation programme (STD, then INCO) have learnt from the focus on adapted technology in the early days that this was necessary, yet insufficient to address the challenge for a transition towards sustainable development. Thus, policy and management oriented research were added as of the early 1990s to develop concepts which could help operationalise the broad principles enshrined in such international frameworks as Agenda 21 adopted at the Rio Earth Summit in 1992. The thematic coverage kept a focus on basic concerns of sustainable food production in harmony with the natural resource base, including marine resources, and health and equitable socio-economic conditions in human societies (Nauen 2002).

FROM KNOWLEDGE TO ACTION

Successive industrial revolutions have revealed the intricate relationship between transitions in human societies and technological breakthroughs. Fishing as a subset of socio-economic activities was also deeply affected by these changes. These were mediated in a variety of ways with international trade acting as one of the major

driving forces in accelerating change.

There is now growing recognition of the critical role of knowledge and human and institutional capital (as many economists chose to call it) for the ability of human societies to mobilise their potential for understanding and managing this change. For a transition towards sustainable development must involve maintenance or restoration of natural capital, economic viability and social equitability (Holling 2000). Scientific partnerships are a valid contribution to this objective as they develop all three dimensions, knowledge, human and institutional capital.

However, communication between researchers and major societal actors (from government and private sector to various representatives of civil society involved in fishing and coastal activities) tends to be limited, though John Kurien's and the International Collective in Support of Fishworker's own activities were among notable exceptions. This explains at least partially why comparatively little of the rich scientific literature and diverse local knowledge embedded in maritime societies gets exchanged and influences public policy in fisheries and aquaculture, let alone using it in the context of conventional aid projects.

Some existing sources of information and strategies for providing the best available knowledge on aquatic resources and their use by humans from different knowledge systems and across linguistic barriers are presented and discussed in Feoli and Nauen (2001). Creating crossroads of knowledge, new approaches to knowledge creation and joint learning and developing entire innovation systems around such platforms seem among the most promising ways to address the key issues highlighted by Kurien and others.

These opportunities and challenges require mobilisation and organisation of knowledge, learning and action both in industrialised and developing countries on a broad front. This should allow concurrently to

- combine the environmental, socio-cultural and economic dimensions of the relationship people have to the sea and its resources;
- enable inter-disciplinary networking around the principal themes identified and also incorporating existing networks;
- build bridges between the different types of partnerships involved.

The setting up of a platform of partners creates an open and permanent dialogue space with the ability to interface transdisciplinary research, private sector in different configurations, local and national administrations and civil society in various articulations. Mobilising the strengths of these different partners synergistically should ensure stronger links from knowledge to action and address equitability issues and restoration of the resource base in a more pro-active way.

REFERENCES

Collet, S.

1991 Guerre et pêche: quelle place pour les sociétés de pêcheurs dans le modèle des chasseurs-cueilleurs? *Human Societies and Ecosystems / Sociétés Humaines et Ecosystèmes. Information sur les Sciences Sociales* 30(3):483-522.

Feoli, E. and C.E. Nauen (Eds.)

- 2001 Proceedings of the INCO-DEV International Workshop on Information Systems for Policy and Technical Support in Fisheries and Aquaculture. Los Baños, Philippines, 5-7 June 2000. *ACP-EU Fish. Res. Rep.* (8). Brussels.
- Holling, C. S.
2000 Theories for Sustainable Futures. *Conservation Ecology* 4(2):7.
- Nauen, C.E.
2001 International S&T Cooperation for Sustainable Development. Some Thoughts on European Experience over the Last 20 Years. Background Paper Contributed to the Third World Academy of Sciences' International Workshop on Science and Technology for Sustainable Development, Trieste, 6-9 February 2002.
- Pauly, D. and V. Christensen
1995 Primary Production Required to Sustain Global Fisheries. *Nature* 374:255-257.
- Pauly, D., V. et al.
1998 Fishing Down Marine Food Webs. *Science* 279:860-863.
- Sen, A.
1999 *Development as Freedom*. New York: Doubleday.