

## **TRAINING AND AWARENESS FOR RESPONSIBLE FISHERIES: THE FAO FISHCODE PROGRAMME**

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**ABSTRACT:** FishCode is the FAO Fisheries Department’s special programme of global partnerships that combines the Regular Programme and Trust Fund resources to promote and implement the Code of Conduct for Responsible Fisheries (CCRF) and its related international fisheries instruments. The CCRF constitutes the primary normative framework for the activities of the Fisheries Department, and FishCode component projects and activities address application issues and problem areas requiring immediate attention in order for the Code’s strategic aims to be achieved. This presentation focuses on Programme initiatives to foster appreciation and practical application of Code of Conduct approaches among national fisheries management practitioners and to build a broader public awareness for responsible fisheries, including among youth. The process is one of capacity building and “information brokerage” to promote stakeholder networks and communities of practice between producers, providers, advocates and other professional and popular users of responsible fisheries-related knowledge and tools – a process of strong mutual interest to FishCode and IAMSLIC.

### **Introduction**

This presentation is divided into three parts. A brief review of global fisheries and international concern for their problematical state and prospects will first be given. The work of the FAO Fisheries Department (FI) will then be situated within this context, with reference to the overall framework of the Code of Conduct for Responsible Fisheries (CCRF) and a principal FI modality for promoting its implementation – the FAO FishCode Programme. Finally, activities highlighting FishCode activities directed towards “information brokerage” and responsible fisheries training and awareness raising will be outlined.

## The “Meanings of Fish” and the State of Global Fisheries

Why bother about the question of fisheries? What is so important?

The answer to such questions lays in the “meanings of fish” to the world community in terms of livelihood, commodity and food.

### *Fish as livelihood*

In 2004 FAO estimates indicated that some 38 million people around the world work as fishers or fish-farmers, the vast majority as small-scale operators.<sup>1</sup> A further 114 million people are estimated to be employed in other fisheries associated occupations, particularly in processing and trading, bringing the total estimated to be directly or indirectly employed in the small-scale fisheries and aquaculture to about 152 million.

In addition, there are other rural dwellers involved in seasonal or occasional fishing activities who are not recorded as “fishers” in official statistics. These people include many millions, especially in Asia and Africa, living in remote rural areas, where there are few other sources of alternative income and employment offering significant potential to contribute to livelihood strategies.

### *Fish as commodity*

Estimated international import and export trade in fisheries commodities amounts to tens of billions of dollars annually. Recent figures<sup>2</sup> show historically unprecedented import levels of more than US\$61 billion, and export trade standing at around US\$55 billion (Figure 1).

While there is an important trade of fish and fishery products among the more developed economies, trade tends to flow from the less developed to the more developed countries.

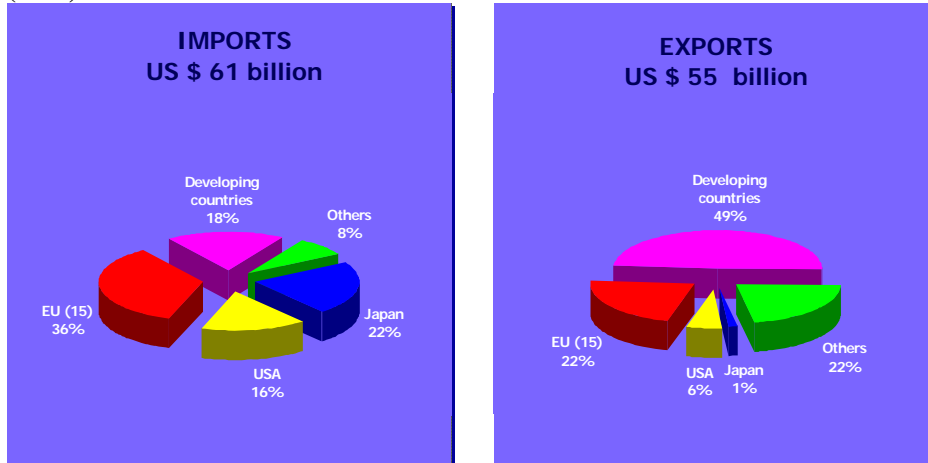
Developed countries accounted for about 82 percent of the total value of imports of fish products. The main importing countries are the EU, Japan and the USA, with around 80% (in value) of fish imports. For Low-Income Food Deficit Countries especially, the challenge is how to serve such lucrative markets, and meet their stringent access conditions, without compromising domestic food security.

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<sup>1</sup> FAO. The state of world fisheries and aquaculture (SOFIA) 2004. FAO, Rome. 2004.

<sup>2</sup> FAO. The state of world fisheries and aquaculture (SOFIA) 2002. FAO, Rome. 2002.

**Figure 1. Estimated international import and export trade in fisheries commodities (2002)\***



\* Based on SOFIA 2002.

### *Fish as food*

Although the role of fish in nutrition shows marked continental, regional and national differences as well as income-related variations, the overall global trend has been toward increased fish consumption. The average apparent per capita consumption of fish worldwide is now estimated to be about 16 kg, or 21 percent greater than in 1992.<sup>3</sup>

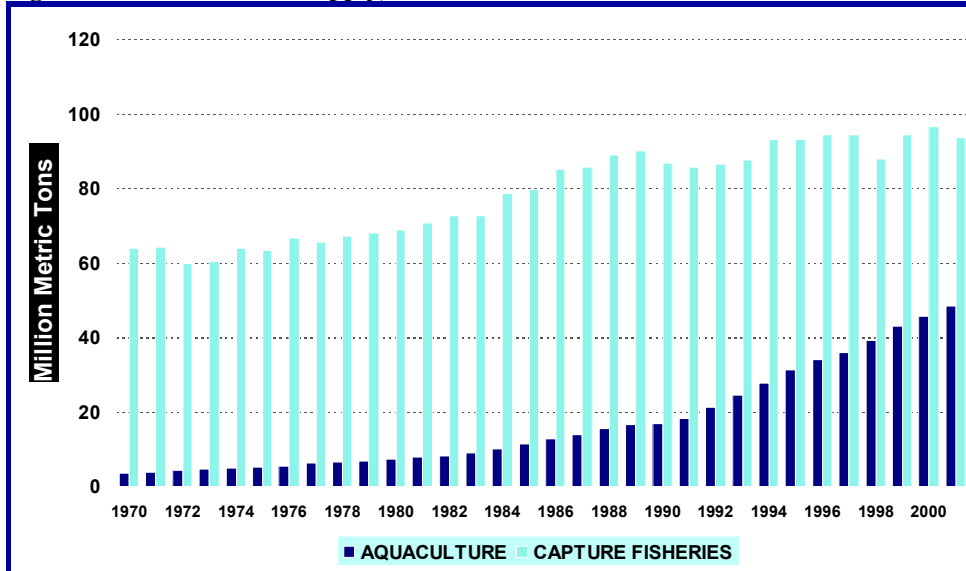
In many parts of the developing world, fish represent the single most important source of animal protein. And wherever fish contributes to people's diets, it also provides them with significant micronutrients, minerals, and essential fatty acids.

### *The state of global fisheries*

While fish clearly have enormous meaning for the world community, world per capita fish supply has remained stable since the early 1990s, with the decline from capture fisheries being offset by the growth of the contribution of aquaculture. In recent years (Figure 2) just over 60 percent of the total food fish supply has originated from capture fisheries production; with the remaining amount contributed from aquaculture.

<sup>3</sup> Ibid.

**Figure 2. Global food fish supply, 1970 – 2001\***



\* Total aquaculture production in 2001 was 48.4 mmt or 34.1% of total world fisheries landings of 142.1 mmt (FAOSTAT, 2003).

The international community has become aware of the transformation, by human activities, of an apparently limitless resource into one that is now acknowledged to be finite and increasingly fragile. From 1974 there has been a consistent downward trend in the proportions of stocks offering potential for fishing expansion. At the same time there has been an increasing trend in the proportion of overexploited and depleted stocks (Figure 3).

We now face a situation in which about half of the main stocks monitored are fully exploited (52%), producing catches close to their maximum sustainable limits (Figure 4). Approximately one quarter are overexploited (16%) or depleted, (8%) up from an estimated 10 percent in the mid-1970s.

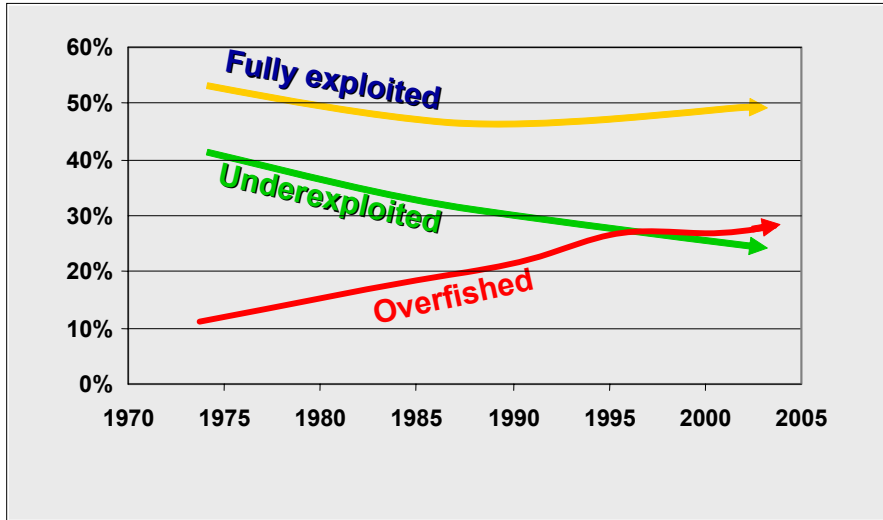
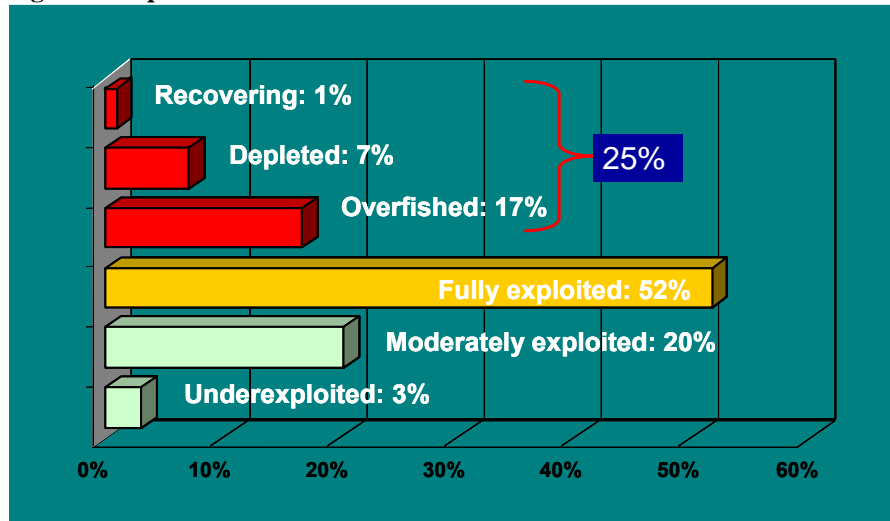


Figure 3. State of fish stocks: Trends 1974-2003\*

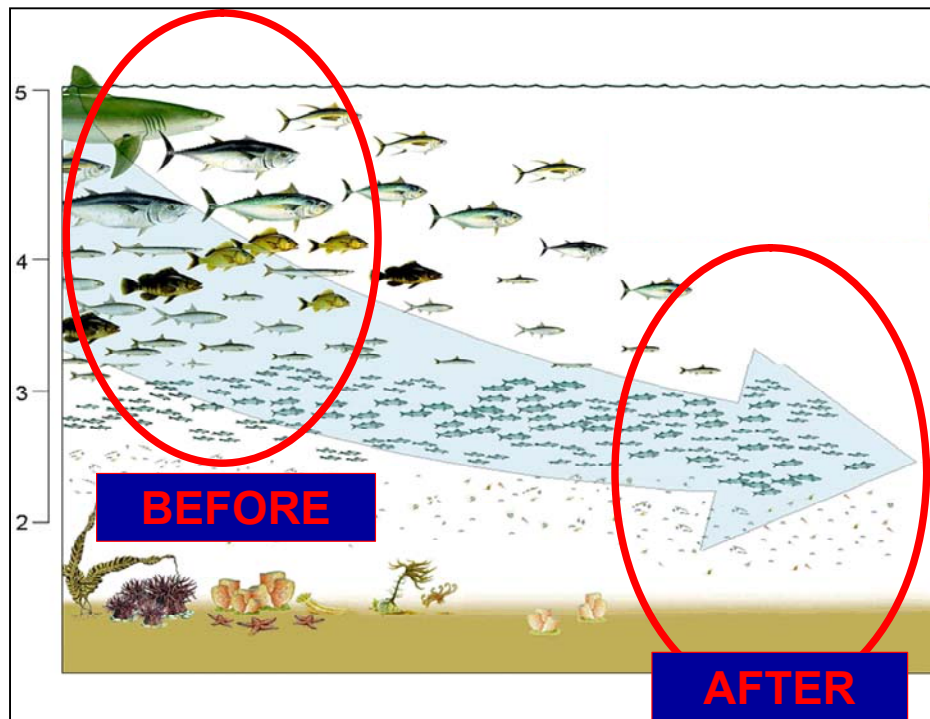
\* Based on SOFIA 2002.

Figure 4. Exploitation status of world stocks\*



\* Based on SOFIA 2002.

Ecosystem-related issues in fisheries are also of concern. For example, a recurring pattern in some marine areas is a long-term change in catch composition following the substantial decrease of more traditional stocks and the targeting of other less valuable species, not previously exploited at significant levels (Figure 5). In addition, inland fishery resources continue to be under threat from habitat alteration, degradation and unsustainable fishing practices.



**Figure 5. Fishing down the food web\***

\* *Source:* Pauly, D. and J. Maclean (2003). In a perfect ocean: fisheries and ecosystem in the North Atlantic Ocean. Island Press, Washington, DC.

Adverse effects on the marine ecosystem are varied and widespread. **Impacts on fisheries** arise from human induced alterations on the marine ecosystem due to pollution, habitat destruction and other forms of environmental degradation. Climatic change – whether directly human induced or not – is also now regarded as a major driver of these processes, which result in:

- reduction of the maximum sustainable yield expected from a resource;
- modification of the resource species composition, health and diversity;

- increase in ecosystem instability and variability; and
- reduction of seafood quality and safety.

**Impacts of fisheries** on ecosystems include the direct impacts of overfishing generally – the existence of excessive harvesting rates and fishing effort on wild resources. Overfishing is often driven by fisheries subsidies and fleet overcapacity and, increasing, by the activities of those who engage in illegal, unreported and unregulated or “IUU” fishing. Other impacts include:

- modification of community species composition and genetic diversity through selective targeting on species and particular size classes;
- effects on non-target species through low selectivity of certain gears;
- incidental mortality from lost or abandoned gear; and
- direct habitat damage or degradation arising, for example from trawls, dredges, coastal aquaculture operations, and destructive fishing practices such as blasting and poisoning.

### **FAO Fisheries, the Code of Conduct and the FishCode Programme**

#### ***The FAO Fisheries Department***

It is within the very wide, complex and troubled international arena just charted out that the work of the FAO Fisheries Department is situated, with a mission ‘*To facilitate and secure the long-term sustainable development and utilization of the world’s fisheries and aquaculture.*’

Activities in support of this mission are implemented by teams of Fisheries Department staff attached to FAO Headquarters as well as to Regional and Subregional Offices and to projects under the Field Programme.

Both Regular and Field Programme activities in support of the Fisheries Department’s mission reflect the precepts and practices laid out in the FAO *Code of Conduct for Responsible Fisheries* (CCRF).

#### ***The Code of Conduct for Responsible Fisheries: A Global Guide***

Adopted by FAO Member States in 1995 against a background of growing risks to global fisheries resource sustainability and food security, the CCRF<sup>4</sup> is the premier global fisheries agreement negotiated through the FAO Committee on Fisheries (COFI), the

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<sup>4</sup> Texts of the CCRF and related international fisheries instruments, along with Technical Guidelines for implementation, are accessible through the FAO Fisheries Department website, <http://www.fao.org/fi>.

world's unique inter-governmental forum for deliberation on major international fisheries and aquaculture problems and issues.

The CCRF serves at once as a global alarm bell and a call and guide to collective action by international stakeholders to work without delay for structural adjustment within the fisheries sector, in order to put it on a more sustainable footing.

Together with the other voluntary fisheries instruments that were developed within its context and are integral to it – the four International Plans of Action on Seabirds, Sharks, Fishing Capacity, and IUU Fishing, and the FAO *Strategy for Improving Information on Status and Trends in Capture Fisheries* – the CCRF overarches activities in the fisheries sector in a comprehensive and integrated manner. It covers general principles, fishery management, fishing operations, aquaculture development, integration of fisheries into coastal area management, post-harvest practices, and trade and fisheries research. It assembles, in a single instrument supported by Technical Guidelines for its implementation, the commitments and requirements of all major instruments of relevance to fisheries. As its “fisheries flagship” instrument, FAO is committed to foster the Code's full and effective implementation, and it thus serves as the primary framework for FI's work programme.

### ***The FAO FishCode Programme***

In the FAO Conference Resolution adopting the Code, Member States requested the Organization to:

- provide advice to developing countries in implementing the Code; and
- elaborate an Interregional Assistance Programme to support its implementation.

The FAO Fisheries Department thus established FishCode as a special umbrella programme of global partnerships to promote responsible fisheries. FishCode's overall objective is to raise the economic, social and nutritional benefits obtained from fisheries and aquaculture, especially in developing countries, through the adoption of responsible fisheries and resource conservation practices.

FishCode was designed as a multi-donor undertaking that combines Trust Fund and Regular Programme resources to facilitate uptake and application of the CCRF and related international fisheries instruments through an array of component projects. It began operating in 1998 and has since undergone considerable growth in scope and content, owing to positive reception by COFI member countries and generous support from donor partners.<sup>5</sup>

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<sup>5</sup> Further background on the Programme and its components is provided on the FishCode website, <http://www.fao.org/fi/fishcode.htm>.



Component projects cover a range of general thematic areas, consistent with the general and operational articles of the CCRF itself. These areas include the following.

- Training and awareness for responsible fisheries and aquaculture
- Marine and coastal capture fisheries management (Policy and scientific advice/ MCS/ legal and institutional aspects).
- Implementation of the IPOA IUU Fishing.
- Small island developing States (SIDS).
- Fisheries post-harvest and trade.
- Inland fisheries and aquaculture.
- Implementation of the Strategy for Improving Information on Status and Trends of Capture Fisheries.
- Support for fisheries research.

Activities under these various thematic areas are commonly carried out at national level, upon request from Member States. They are organized at regional and global level as well. Activities at these different levels may include:

- policy and technical assistance;
- capacity building;
- workshops and conferences; and
- surveys and studies.

Component projects are formulated on the basis of priorities identified by FAO Members through COFI and its Sub-Committees on Aquaculture and Trade, and with reference to:

- FAO's Strategic Framework;
- the Fisheries Department's programme of work and budget; and
- key fisheries-related objectives set out in international agreements, including
  - the Millennium Development Goals,
  - the Declaration of the Reykjavik Conference on Responsible Fisheries in the Marine Ecosystem (2001); and
  - the Johannesburg Plan of Implementation adopted at the World Summit on Sustainable Development (2002).

Component projects are, furthermore,

- multidisciplinary in nature and geared towards practical applications; and
- developed and implemented through collaboration of all Fisheries Department technical services as well as other FAO technical departments, other intergovernmental agencies, and non-governmental organizations, as appropriate.

Component projects also share a common framework for coordination and administration in order to garner:

- operational and cost efficiencies; and
- synergies between themselves as well as with other international fisheries initiatives and projects.

## **Information for Responsible Fisheries Training and Awareness**

The generation, exchange and integration of fisheries information is obviously an absolutely necessary condition for CCRF implementation, and all FishCode component projects serve an “information brokerage” role in one fashion or another, whether in addressing constraints to information flow and sharing at a general level, or through a focus on particular technical issues.

Attention is now drawn to several specific Programme activities in which information facilitation is of special significance in the context of the 31<sup>st</sup> Annual IAMS LIC Conference.

### ***Strategy-STF Project***

The *Strategy for Improving Information on Status and Trends of Capture Fisheries* (Strategy-STF) was adopted by the 25th Session of the FAO Committee on Fisheries (COFI) and endorsed by the United Nations General Assembly (UNGA) in 2003.

The main objective of the Strategy is “...to provide a framework for the improvement of knowledge and understanding of fishery status and trends as a basis for fisheries policy making and management.”

In order to assist with its implementation, the multilateral Strategy-STF Project was designed for execution in two overlapping phases. The first phase, which became operational in November 2004, focuses on development of inventories, methodologies and operational guidelines. The second phase, building on the first, will focus on field training and implementation.

While the Project aims to help give effect to the Strategy-STF globally, special emphasis is placed on capacity building in developing countries and regions. Direct beneficiaries will be national fisheries statistical units, research institutes and fishery administrations.

The Project will directly address the “Required actions” identified in the Strategy-STF, which include, in addition to capacity-building in developing countries, the following:

- Setting up a global inventory of fish stocks and fisheries.
- Developing data collection systems for small-scale and multi species fisheries.
- Developing criteria and methods for ensuring information quality and security.
- Developing arrangements for the provision and exchange of information.
- Supporting and participating in the FAO Fisheries Global Information System (FIGIS).
- Sustaining data collection and information systems.
- Expanding the scope of information on status and trends of fisheries, including the need to incorporate ecosystem considerations into fisheries management.
- Participating in working groups for assessing the status and trends of fisheries.

### ***Training and Awareness Project***

The problems addressed by the CCRF and related international fishery instruments, and by specific goals that have been agreed through such instruments as the Millennium Goals and the WSSD Plan of Implementation, reflect the need for improved fisheries governance.

Progress towards improved fisheries governance will require strengthened political will, clear and effective policies, a strong legislative framework, improved monitoring, control and surveillance (MCS) systems, and regional and international cooperation. However, none of this can be achieved without adequate awareness and political support for responsible fisheries approaches amongst sector stakeholders.

The Training and Awareness Project now underway aims to foster appreciation and practical application of responsible fisheries approaches amongst national fisheries management practitioners. It also aims to address the need for cultivating broader public awareness and support outside fisheries administrations for responsible fisheries practices as set out in the Code of Conduct. Initiatives will include production of multi-media responsible fisheries educational materials.

Particular attention will focus on younger people – tomorrow’s fisheries resource stewards. There is a critical need to pay more attention to youth awareness. Youth comprise the largest proportion of the world’s population based on age and carry, by definition, an enormous potential for shaping a better future.<sup>6</sup> Ninety percent of people under the age of 25 live in developing countries, where problems of sustainable livelihoods and resource use are often acute.

### ***Custom Training Courses Project***

The FishCode Custom Training Courses Project (CTC Project), also now commencing, will strengthen existing FishCode Programme initiatives in capacity building by contributing development and delivery of tailor-made courses on specific responsible fisheries topics, in response to identified needs. Activities will be implemented in close collaboration with the United Nations University Fisheries Training Programme (UNU-FTP) and with key training practitioners, institutions and universities in developing countries, for the purpose of identifying initial course subject areas, and planning their development and delivery.

The expected result of the CTC Project will be a carefully targeted contribution to capacity building in three specific ways:

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<sup>6</sup> United Nations estimates put the number of persons currently aged 15 to 24 at more than 1 billion.

- Trainers in beneficiary countries, with mentoring and encouragement from informal country contact groups, will further be enabled in terms of opportunities for: (i) identifying training needs that can be effectively addressed through the medium of courses; (ii) identifying and adapting suitable source material for courses; (iii) organizing and running courses; and (iv) participation in a growing international network of individuals in the field of fisheries sector training.
- Trainees in beneficiary countries will acquire the knowledge or skill needed to engage their work more effectively.
- A collection of standard source country specific material will be built up, including course materials developed in the life of the Project, and made available electronically for use by trainers in the future.

#### ***Other activities supporting information for responsible fisheries***

The FishCode Programme contributes in various ways to ongoing cooperation between FI and partner institutions to assess information resource and needs, particularly in developing countries, in support of implementation of the CCRF. Areas of action years include improved dissemination, accessibility and preservation of relevant fisheries and aquaculture publications produced in developing countries, and identification of mechanisms for the sharing of information between institutions. Examples of information-facilitating partnerships engaged by the Programme in 2004 – 2005 include the following.

A project with the *Network of Aquaculture Centers in Asia-Pacific* (NACA) relates to the development of guidelines for the dissemination, accessibility and preservation of digital fisheries and aquaculture publications from developing countries. It builds on the experience of NACA and its partners in the implementation of a pilot document repository. The guidelines will be for the benefit of institutions in developing countries and will promote the principles of open access and standard methodologies, in order to strengthen their information capacity and enable the sharing of information with the global aquaculture community.

FishCode Programme resources have also been directed towards support of a joint project between FAO and the *South African Institute for Aquatic Biodiversity*. The Project focuses on promotion of networking for improved access to fisheries and aquaculture information in Africa. Principal aims are to:

- assess information resources and information needs in the different institutions and countries;
- propose mechanisms for the sharing of information between institutions; and
- propose ways of improving the dissemination, accessibility and preservation of African fisheries and aquaculture publications, including digitization.

Well aware that NGOs can serve a critical brokerage and implementation role in advancing the use of information for responsible fisheries, FishCode undertook a

pioneering partnership with the *International Collective in Support of FishWorkers* (ICSF) in early 2005. Support was provided for the Collective's regional workshop on "Sustainable Fisheries and Livelihoods in Latin America: the Imperative of Recognizing Artisanal Fishworkers' Fishing Access Rights" (Santa Clara del Mar, Argentina, 1-4 March 2005).<sup>7</sup> The event, hosted by CeDePesca, included participants from Ecuador, Venezuela, Peru, Brazil, Chile and Argentina. Workshop objectives were to:

- promote understanding about the value and importance of sustainable fisheries, and about fisheries management measures that recognize and protect the access rights of artisanal and small-scale fishworkers;
- review the contribution of small-scale fisheries to sustainable development (poverty alleviation, food security, resource conservation etc) in Latin American countries;
- review the various formal and informal management provisions that have been adopted by countries in the Southern Cone region of Latin America to protect access rights of artisanal fishworkers to fisheries resources, and to examine the effectiveness of these provisions for protecting livelihoods and for improving management of fisheries resources;
- within a sustainable fisheries framework, highlight the need to develop, strengthen and improve measures to protect the access rights of artisanal and small-scale fishworkers; and
- review the FAO Code of Conduct, and highlight the particular contribution its implementation could make to protecting and promoting small-scale fisheries.

Finally, and by no means least of all, partnership with *IAMSLIC* should be highlighted. The FishCode Programme has provided staff as well as financial backstopping for this 31<sup>st</sup> Annual Conference on "Information for Responsible Fisheries: Libraries as Mediators." Such support marks both recognition and practical advocacy for the Association's involvement in the process of capacity building and information brokerage to promote stakeholder networks and communities of practice between producers, providers, advocates and other professional and popular users of responsible fisheries-related knowledge and tools. This is clearly a matter of strong mutual interest. The FishCode Programme looks forward to continued collaboration with IAMSLIC and its members in furtherance of the process.

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<sup>7</sup> For further background, see the ICSF website, <http://www.icsf.net/jsp/english/index.jsp>.