IFA-CCRF

CAPACITY BUILDING IN SUPPORT OF IMPLEMENTATION OF THE CODE OF CONDUCT FOR RESPONSIBLE FISHERIES

Background

More than 500 million people depend, directly or indirectly, on fisheries and aquaculture for their livelihoods. Fish also provides essential nutrition for 3 billion people and at least 50 percent of animal protein and essential minerals to 400 million people in the poorest countries. However, fisheries and aquaculture are facing a number of serious challenges driven in particular by demand far outstripping sustainable yields from capture fisheries, while aquaculture production is experiencing environmental and production challenges.

Many of these challenges were already evident to the Members of the Food and Agriculture Organization of the United Nations (FAO) in the early 1990s. They reached agreement on the need for new concepts that would lead to responsible, sustainable fisheries and aquaculture and, in 1995, they adopted the Code of Conduct for Responsible Fisheries (the Code). The Code sets out principles in a comprehensive document that have across-the-board application to all fisheries and aquaculture. Its emphasis on a precautionary approach to fisheries and aquaculture management provides the foundation for the protection of ecosystems and biodiversity and, not least, respect for local social and economic systems. The Code is consistent with the 1982 United Nations (UN) Convention on the Law of the Sea as well as with the 1993 FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement. Most importantly, the Code is supported by four international plans of action (IPOAs – on seabirds, sharks, fishing capacity and illegal, unreported and unregulated [IUU] fishing). In addition, two strategies have been designed to improve data collection and monitoring systems for both capture fisheries and aquaculture. Technical guidelines also support implementation of the Code and promote best practices.

However, despite best efforts to implement the Code fully, severe overexploitation of the world's capture fisheries has continued. FAO estimates that more than 80 percent of fish stocks are fully exploited, overexploited, depleted or in the process of rebuilding as a result of depletion.

In order to ensure sustainable fisheries and aquaculture for future generations, a range of challenges must be addressed, including improved understanding and preparedness for the impacts that climate change will have on world fisheries and aquatic ecosystems. The contribution that fisheries and aquaculture make to poverty alleviation must be more fully understood and enhanced by maximizing income generation through improved market access and better management of resources. In addition, accurate data on small-scale fisheries and aquaculture are needed to inform sound decision-making. Many of the problems are common to most developing countries: limited staff capacity and lack of adequate technical tools, statistical methodologies and survey frameworks. The ecosystem approach to both fisheries (EAF) and aquaculture (EAA), which tries to balance societal objectives with the state of the fishery and aquaculture resources and their human and natural environment, provides a framework for a comprehensive implementation of the Code. While many countries have embraced the ecosystem approach and its principles, they need support for effective implementation. The inclusion of the human dimension provides an effective vehicle for addressing the complexities of fisheries and aquaculture management.

Consistent with the priorities of the Committee on Fisheries (COFI) and the COFI Sub-Committees of Aquaculture and Trade, FAO seeks to promote responsible fisheries and aquaculture sector management with priority given to capacity building in support of the Code, Compliance Agreements and IPOAs.

Partnerships

FAO has a wealth of experience of working closely with governments and fishing and aquaculture communities on a variety of development activities and is a recognized partner for technical assistance. Moreover, as a UN Agency, FAO is uniquely placed to assist governments in coordination and to provide technical advice.

COFI is a primary forum for defining and developing partnerships. In addition to its governance role for Member States, it serves as an important intergovernmental meeting for strategy and policy development and for debate and endorsement of emerging issues. It also provides an important arena for linkages with other intergovernmental bodies, international and regional investment bodies, research agencies, international non-governmental organizations (NGOs) and civil-society organizations. Links with regional fishery bodies (RFBs), regional economic councils (RECs) and other regional bodies are key areas of interaction for regional and subregional offices.

Ecosystem approach to fisheries and aquaculture

The issue

The failures of conventional fisheries and aquaculture policies and management are well known. As regards aquaculture, its growth worldwide results in the expansion of cultivated areas, a higher density of installations and of farmed individuals, and greater use of feeds, with important consequences for the environment and interactions with other human activities, including fisheries. Overfishing and unsustainable aquatic resource management practices threaten the very basis of the livelihoods of many poor and vulnerable fishing and fish farming communities. The EAF and EAA are strategies that promote conservation, sustainable use and equitable sharing of ecosystem services. The benefits of more participatory and holistic approaches to natural resource management, which consider both the ecological and human dimensions, have become widely recognized. For fisheries and aquaculture, these benefits include: reduction of greenhouse gas (GHG) emission by the sector, reduction of bycatch in fisheries, and reduction of the risk of exotic species use in aquaculture. However, while general principles are well accepted and understood, great challenges still remain in actual implementation.

What has FAO done?

Guidance developed by FAO in the past decade assists users by taking them through practical steps of planning and implementation while recognizing the need to be consistent with local context, means and culture. Through a number of extra-budgetary supported projects, it has been possible to introduce concepts and methodologies relevant for EAF/EAA application to several regions by means of dedicated workshops (e.g. in South and Southeast Asia, Pacific Island States, Africa and the Caribbean region). At present, medium to large-scale projects aimed at the promotion and implementation of the EAF are in progress, for example in the coastal countries of Africa, as well as in six Fisheries Management Support projects in the Mediterranean. FAO, together with the United Nations Environment Programme (UNEP), is executing the Canary Current Large Marine Ecosystem (CCLME) Project to reverse the degradation of the Canary Current large marine ecosystem. Similarly, the Bay of Bengal Large Marine Ecosystem (BOBLME) Project is supporting the countries bordering the Bay of Bengal to work together on a coordinated programme of action to improve the lives of the coastal populations. Both projects are supported by core

funding from the Global Environment Facility (GEF), and cofinanced by a number of partners. Similarly, the GEF has provided core funding for a global project to reduce the environmental impacts associated with tropical shrimp trawling, and more recently for a regional project in Southeast Asia to manage trawl bycatch. In May 2009, FAO and the Asia-Pacific Fishery Commission (APFIC) held a regional consultative workshop on the practical implementation of the EAF and EAA, which has triggered increasing interest among Member States to implement the EAF and EAA in the region.

As guidance on applying the EAA becomes available, field activities aimed at facilitating its implementation are being undertaken within the aquaculture sector. Relevant tools such as environmental impact assessments (EIAs) and risk analysis (RA) are being promoted in many countries and regions. Furthermore, considering the increasing interactions between capture fisheries and aquaculture, FAO has also initiated pilot EAF/EAA implementation activities in some countries. One such case is the "Estero Real", a tropical mangrove estuary in Nicaragua. The area is at risk of a high level of degradation, partly because of shrimp fisheries and aquaculture but also because of other activities including inappropriate land-use practices, sedimentation, and pollution from agriculture and sewage. Implementation of the EAF and EAA through participatory steps, planning and management measures with an ecosystemic perspective has attempted to provide the very poor and marginalized coastal communities with sustainable livelihoods in the fisheries and aquaculture sector. A similar pilot implementation is being carried out in the Gulf of Pangasinan in the Philippines.

With the UNEP and the GEF, FAO has carried out in-depth case studies that have informed the production of technical guidelines on bycatch management. Work has concentrated on the tropical shrimp trawling regions: Latin America and the Caribbean, Africa, Near East and Asia. It has already led to successful outcomes in the Philippines, Mexico, the Caribbean, Venezuela (Bolivarian Republic of) and Thailand. This work focuses on the introduction of more appropriate fishing technologies, improved legislation and improved management frameworks (including control and enforcement strategies). Activities include workshops, training sessions, and demonstrations. Success depends on adopting participatory approaches – from fishing communities to industry – and the initiative actively promotes technology transfer. In those countries supported, bycatch has decreased by 30–70 percent and savings in fuel consumption have been about 20 percent.

What next?

- Develop practical national and regional tools, methodologies and best practice guidelines for EAF/EAA planning and implementation.
- Support practical implementation of EAF/EAA at the national and regional level, including examining the interactions between the fisheries and aquaculture sector and other sectors.
- Address specific sustainability issues such as development of methodologies to monitor and reduce GHG emissions in the fisheries and aquaculture sector and promotion of low-impact fuel-efficient fish capture techniques.

Availability and application of data for small-scale fisheries and aquaculture

The issue

It is estimated that the fisheries and aquaculture sector as a whole provides some 170 million jobs globally. The vast majority of these are small-scale operators in developing countries; assessments indicate that 90 percent of the 35 million full-time and part-time fishers in the world are small-scale and that 95 percent of them live in developing countries. It is also estimated that, in developing countries, small-scale fishers land more fish than their large-scale counterparts and that nearly all this production is used for direct human consumption. In spite of the apparent importance of the sector in providing employment and food supplies, many small-scale operators lack the means to influence and improve their living conditions. Moreover, information on the small-scale fisheries and aquaculture sector is generally lacking and, hence, it is difficult to make more precise assessments

of its role and potential. It is also difficult to pledge support and resources for the sector when there are only limited official quantitative data on its importance. Small-scale fishing and fish farming communities are often excluded from processes of development planning because their role and contribution to the economy are poorly known and underappreciated. Information on the value of fisheries for food security and resource management at the global level is one of the core functions of FAO and its Fisheries and Aquaculture Department.

What has FAO done?

The FAO FishCode STF project supports the improvement of the availability of information with special emphasis on small-scale fisheries through partnerships with regional fisheries organizations and national institutes. In West Africa, this partnership has led to significant improvements in basic data on marine small-scale fisheries and to harmonization of data collection in the region. In Nicaragua, improved information has been used to include fisheries in the national food security policy.

FAO has undertaken studies on the role of women in the inland and marine fisheries sectors (e.g. on microfinance in fisheries and aquaculture, livelihoods and microenterprise development opportunities for women in communities in India). These studies have informed policy-makers at all levels and have led to greater awareness of the role of women in the fishing sector. FAO, after wide consultation in the Asia-Pacific, Africa and Latin America and the Caribbean regions, now has a global programme that incorporates a rights-based approach. It includes all human rights charters and instruments, user access rights to resources and rights to assistance after disasters. Gender is mainstreamed at FAO and in its interventions, and the important role of women in the fisheries sector is consistently integrated.

Capacity building in collecting information on small-scale fisheries is a major issue. Therefore, in November 2010, FAO supported the development of a regional training course in collaboration with the Legon University, Accra, Ghana.

Alternative approaches in line with the global strategy to improve agricultural and rural statistics are promoted. Recently, the fisheries sector has been included in the agriculture household census of the Lao Peoples' Democratic Republic.

The "Hidden Harvests" study was carried out in collaboration with the World Bank and WorldFish Center to update the global profile of small-scale fisheries.

Various studies and field research projects have been undertaken to improve information and data on the contribution of aquaculture to poverty alleviation, food security and nutrition, particularly addressing the issue of improving information and data on the subject and better assessment methodologies.

Reporting procedures followed by FAO Members in compliance with the Code have been improved to obtain vital socio-economic data on small-scale aquaculture.

What next?

- Implement similar activities and develop a subregional training course – planned for East Africa in collaboration with the Southwest Indian Ocean Fisheries Commission (SWIOFC) and subregional economic bodies.
- Support the further development of training courses.
- As information on inland fisheries and small-scale aquaculture is highly uncertain, support the development of new approaches to assess the value of these sectors.
- Develop systems and guidelines for small-scale fisheries and aquaculture data collection and analysis in accordance with the identified data priorities.
- Support relevant regional organizations for the establishment of regional information systems for compiling, analysing and disseminating data on small-scale fisheries and aquaculture.

Improved domestic, regional and international market access for small-scale fisheries and aquaculture producers

The issue

Developing countries contribute up to 50 percent in value to international fish trade. This affects positively their economies by improving the wealth extracted from the fishery's resource, creating millions of employment opportunities and generating foreign exchange income. However, many of these developing countries rely significantly on small-scale fisheries and aquaculture for fish supply. Given that over 70 percent of global fish export is destined to 3 major markets (European Union, United States of America and Japan) with elaborated market access requirements, export of small-scale operators is increasingly constrained by these requirements, in particular standards for consumer protection, sustainability, environment protection and social responsibility.

What has FAO done?

Capacity building for improving fish trade performance in selected African countries, funded by the Standards and Trade Development Facility (STDF) and implemented by FAO, has assisted five countries in West Africa (Benin, the Gambia, Mauritania, Senegal and Sierra Leone) in improving hygiene and fish-handling practices all along the value chain and in complying with international market requirements. The fish producers, handlers, processors and inspectors were trained on issues related to the Sanitary and Phytosanitary (SPS) Agreement and international regulations. A technical and trade database for improving international fish trade was developed using the participatory approach and made available to the countries. During the implementation of the project in 2009–2010, Benin, Mauritania and Senegal were included in the list of countries authorized to export fish and fishery products to the European Union (EU), and significant progress was made by the Gambia and Sierra Leone as indicated by inspection reports from the EU Food and Veterinary Office (FVO).

The ongoing FAO-NORAD project on small-scale fisheries value-chains analyses the distribution of benefits in the value chain and the linkages between the relative benefits obtained and the design of the chain. Comparisons are made between domestic, regional and international value chains in order to understand how developing countries can increase the value derived from their fishery resources and exports. The project includes ten case studies from selected developing countries, and two studies from the small-scale sector in developed countries. In the project, FAO brings together interdisciplinary experience from all the world's regions and involves stakeholders from the small-scale sector, from governments and from academia.

A project was undertaken to strengthen national capacity in sanitary control and responsible utilization of fish products – implemented in 2005–07 along Lake Chad and the River Chari Logone in Chad. The second component of this project contributed to the development and dissemination of improved fish preservation and processing technologies and an innovative approach to address technical and socio-economic constraints of small-scale fisheries operators. It activated the group dynamic by strengthening professional associations and also boosted the operational capacities of post-harvest operators through training and pilot demonstrations. This led to greater benefits from the marketing of products through increased value-addition following improvement in the quality of processed fish and reductions in post-harvest losses. This project was the winner of the 2008–09 Edouard Saouma Award.

What next?

- Analyse market access constraints, including a gender perspective, both at the local level and with regard to requirements in regional and international export markets.
- Develop appropriate communication systems for market information.
- Assess the context of the occurrence of post-harvest losses; support the development of technologies

for low-cost value-added products and their adoption by the disadvantaged groups within fishing and aquaculture communities; and facilitate the establishment of commercial partnerships. This to be done in the Africa region, in collaboration with the FAO Rural Infrastructure and Agro-Industries Division, the African Development Bank, and some core regional institutions. In 2006–08, the FAO Fisheries and Aquaculture Department's Products, Trade and Marketing Service headed a regional programme on post-harvest fish loss assessment in Africa that produced tangible outputs. The design and implementation of any sustainable loss-reduction intervention would highly benefit from this experience and the tools produced.

- Encourage sustainable utilization of freshwater fish resources in five target countries through appropriate product and market diversification strategies, taking note of the food security and well-being of the populations as a whole, and of inland communities in particular – regional project CFC/FSCFT/29 (FAO and regional partners).
- Support improvement of fish handling practices and development of value addition for fish caught by longline fishing – regional TCP/RAS/3302 project in South Asia.
- Provide training and support for organizational and capacity development, with a special emphasis on women and marginalized post-harvest workers
- Develop and disseminate information material and best practices.

Improved response to and preparedness for disasters and impacts of climate change

The issue

The number of natural disasters has increased from about 75 to more than 400 per year since 1975,[1] with events of hydro-meteorological origin constituting the large majority. There is high confidence that climate change will increase the frequency and magnitude of weather-related natural disasters. The significant contribution that fisheries and aquaculture make to food and nutrition security, and to livelihoods, is threatened because fishing and fish farming communities are particularly vulnerable to natural disasters and the potential impacts of climate change. This vulnerability is a result of their location and the characteristics of the livelihoods themselves. Despite the growing understanding and acceptance of the importance of disaster risk reduction and increased disaster response capacities, disasters and in particular the management and reduction of risk continue to pose a global challenge to the sector.

What has FAO done?

Emergency response

Almost since its foundation, FAO has supported countries in preparing for and responding to disasters. Specifically, it is the specialized technical agency for fisheries and aquaculture and is the UN emergency cluster leader for agriculture (including fisheries, aquaculture and forestry). Working in partnership with the FAO emergency response division and decentralized officers, the Fisheries and Aquaculture Department currently has US$30 million of emergency response projects in 25 countries. The types of disasters the Department is called upon to respond to include droughts, earthquakes, floods, landslides, storms, tsunami and tidal surges, transboundary pest and disease outbreaks, complex emergencies and protracted crises (such as conflict), chemical hazards (such as oil spills), and food security crises. The objective of these interventions is to support recovery of production in order to reduce reliance on food aid and to rapidly restore sustainable livelihoods for the affected populations.

1 According to the Centre for Research on the Epidemiology of Disasters (CRED) and US Agency for International Development.

The type of actions the Department has taken to support all elements of the emergency response include:

- support to damage and needs assessment;
- response and transition planning from emergency to medium-term recovery and to long-term development planning;
- coordination as fisheries and aquaculture subcluster leader;
- technical capacity building;
- provision of technical advice;
- communication, partnership development;
- repair of infrastructure and provision of livelihood assets (such as fishing gear, landing sites, ice plants, hatcheries, ponds).

For example, in Bangladesh, Democratic Republic of the Congo, Haiti, Indonesia, Myanmar, Pakistan, Somalia and Sri Lanka, FAO has supported governments and partners in assessing damage, in restoring livelihoods based on thorough needs assessment and as part of an integrated programme, in recovery planning through the provision of technical advice and the development of capacity, and in building partnership and facilitating coordination. In Myanmar, after the 2008 devastation caused by cyclone Nargis, FAO trained local boatbuilders, NGOs and others to build safer, more stable boats, taking traditional practices as a starting point. Some 200 safer, local boats were completed. In Sri Lanka, FAO constructed 50 community-managed landing sites with improved design to reduce risk. In Banda Aceh (Indonesia), a comanagement-based intervention trained 164 motivators in fisheries development and management; 40 officers from 4 districts and provinces were trained in fisheries management. This resulted in communities taking their own decisions regarding fishing capacity.

FAO has provided effective emergency response to a serious disease incursion in southern Africa (Botswana) and has carried out active surveillance for epizootic ulcerative syndrome in seven countries bordering the Chobe-Zambesi River.

Disaster risk management and climate change adaptation

A key element in reducing the impact of disasters is to strengthen the capacity of vulnerable communities, partners and governments to prepare for and respond to events. In addition to responding to emergencies, the Department also supports the sector, partners and countries in disaster risk management (DRM). National disaster preparedness agencies are responsible for coordinating and preparing for events. However, in many cases, only limited attention is paid to the specific needs of the agriculture, fisheries and aquaculture sectors, resulting in slow recovery of livelihoods and food production post emergency.

The Department focuses on supporting integration of fisheries and aquaculture into DRM and climate change adaptation (CCA) strategies and plans and enhancing capacities within communities and local and national administrations and ministries for DRM and CCA. For example, in Dominica, the Philippines and Saint Lucia, FAO work is contributing to:

- improved capacities of government staff to update and implement national risk mitigation policies and provide technical assistance to communities;
- promotion of community-based risk mitigation approaches involving farmers and fishers directly affected by disasters as well as representatives of other vulnerable groups;
- improved capacities for vulnerability mapping and damage assessment.

In aquaculture, the Department has targeted capacity building with a wide range of beneficiaries (government, producers, academia, research institutes) in areas such as basic aquatic animal health management, diagnostics, surveillance, risk analysis, emergency preparedness, and the development of national strategies and regional frameworks. The Department has also provided analysis of capacity and performance in aquatic animal health and biosecurity management to a large number of countries including in the Persian Gulf, Western Balkans and Africa regions.

The work of the Department in DRM and CCA is guided by internationally agreed frameworks such as the Code and supports the achievement of targets under the United Nations Framework Convention on Climate Change (UNFCCC), the Intergovernmental Panel on Climate Change (IPCC) and the Hyogo Framework for Action 2005–20015 for Disaster Risk Reduction.

FAO's lead advocacy has also been essential in launching and supporting the development of DRM/CCA networks. Since 2009, the FAO Fisheries and Aquaculture Department has acted as the secretariat to the Global Partnership for Climate, Fisheries and Aquaculture (PaCFA).[2] The PaCFA is a voluntary partnership of 20 international organizations and sector bodies that share a common concern for climate change interactions with global waters and living resources and their social and economic consequences.[3] Ahead of the 2009 UNFCCC meetings, the PaCFA created a joint policy brief[4] to raise awareness of the issues facing the sector and actively participated in COP15 in Copenhagen to highlight the need to consider aquatic systems and fisheries and aquaculture in UNFCCC discussions. Other examples of the PaCFA's work include an expert workshop and an FAO publication on climate change implications for fisheries and aquaculture, the publication of the Blue Carbon report,[5] and development of joint project proposals based on a priority analysis undertaken by the PaCFA in 2009.

What next?

- Develop capacity of fishing and fish farming communities in vulnerable countries, including in small island developing States (SIDSs), to enhance resilience against disasters and cope with the impact of climate change, through support to local and national authorities to build on existing action plans and prepare and implement multisectoral action plans.
- Strengthen the technical capacity of partners in fisheries and aquaculture DRM at the global, regional and national level (including prevention and management of fish diseases) – this to be achieved through strengthening existing and developing new networks and communities of practice. In particular, ensure that standards and guidelines for best practice and assistance in fisheries and aquaculture are transferred to partners and countries in responding and managing disaster events.
- Strengthen and improve technical advice in the sector relating to DRM and emergency response – this to be achieved through the development of best practice and minimum standards in DRM and emergency response through international expert consultations. Guidance and standards to include key areas such as (impacts on):
  - inland and marine capture fisheries;
  - best management practices in aquaculture;
  - biosecurity and aquatic animal health management in aquaculture;
  - fisheries and aquaculture post-harvest and processing;
  - policy and recovery planning for fisheries and aquaculture;
  - sustainable resource management and conservation;
  - small-scale fisheries rights, access and equity;
  - priority emergencies in the sector, including cyclones, tsunamis, floods, oil spills and nuclear emergency preparedness (in response to the Memorandum of Understanding with the International Atomic Energy Agency [IAEA]).

2 www.climatefish.org
3 Current members of the PaCFA are the BCC, CBD, EBCD, FAO, GLOBEC, ICES, ICFA, ISDR, NACA, NACEE, OECD, OSPESCA, PICES, SEAFO, SPC, UNDP, UNEP, UNESCO-IOC, World Bank, WorldFish Center.
4 ftp://ftp.fao.org/FI/brochure/climate_change/
5 www.grida.no/publications/rr/blue-carbon/