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# SUSTAINABLE FISHERIES AND AQUACULTURE

## Rio+20 and beyond

### Fisheries and aquaculture – contributing to food security and poverty reduction

The fisheries and aquaculture sector is a vital but often overlooked contributor to food and nutrition security and poverty reduction – particularly in developing countries. Nearly 45 million people around the world are directly engaged in fishing or aquaculture, the vast majority in small-scale operations. When those engaged in secondary activities (such as boatbuilding and repair, processing and marketing) are included, plus all their dependents, about 540 million people, almost 8 percent of the world's population, rely on fisheries and aquaculture.

But fishing communities, often poor and marginalized, are vulnerable to a range of threats. Overfishing and unsustainable practices jeopardize the very foundation of their livelihoods. Lack of collateral shuts them out of credit markets. Their rights to land and fishery resources are often insecure. Many in coastal areas are exposed to natural disasters, a risk that is increasing with and compounded by climate change.

### Fisheries and Aquaculture at-a-glance

**Fish production & consumption** World capture fisheries and aquaculture produced 144.6 million tonnes of fish in 2009 – 121.8 million tonnes for human consumption. Aquaculture, the fastest growing food sector for many years, provided 55.7 million tonnes in 2009 – showing a continued average annual growth rate of 6.1%.

**Nutrition** Fish is rich in micronutrients generally not found in staple foods and vital to the diet of many people in developing countries, especially in many poor and food deficit countries. Globally, fish provides about 2.9 billion people with almost 20 percent of their average per capita intake of animal protein and 4.2 billion people with 15 percent of such proteins. In countries such as Bangladesh, Cambodia, Ghana, Indonesia, Sierra Leone, and the Solomon Islands, fish contributes more than half of animal protein intakes.

**Employment** Jobs in fisheries and aquaculture have grown substantially in the last three decades at an average annual rate of 3.6% since 1980. The entire fish industry provides employment for over 180 million people, half are women – in fact, employment in fisheries and related upstream and downstream activities has grown faster than the world's population and faster than employment in traditional agriculture.

**Trade** Fish and fishery products are among the most traded food products in international markets. In 2009, world exports of fish and fish products reached US\$96 billion. The share of developing countries in total fishery exports was 50.6 % by value and 60.1 % by quantity (live weight equivalent). Fishery net exports of developing countries (i.e. the total value of their exports less the total value of their imports) showed a continuing rising trend – more than trebling between 1989 and 2009 to US\$25.5 billion and significantly higher than those for other agricultural commodities such as rice, coffee and tea.



### Ecosystems under threat – stifling sustainable development

Humankind depends on healthy aquatic ecosystems and the availability of aquatic resources for food production, tourism, shoreline protection, carbon sequestration, genetic materials and other environmental services. But the steady degradation of the aquatic environment and natural resource base significantly impacts hundreds of millions of livelihoods and threatens the basic life support systems of our planet.

Sustainable development – a concept prominently embraced at the 1992 World Summit – is the approach recognized by the international community to deal with environmental, social and economic issues the world faces. Despite efforts over the last 20 years, aquatic ecosystems – from inland waters to coasts – are in peril, with fishing communities often ill-equipped to cope with existing and emerging issues, and all levels of government with limited capacity to effect the institutional change required to address these issues. This seriously compromises the present and future potential of fisheries and aquaculture, especially the realization of the sector's primary task: contributing to food security and nutrition and the ability of countries to progressively realize the right to food.



**RIO+20**  
United Nations Conference  
on Sustainable Development

## Rio+20 – a new opportunity to renew commitments towards sustainable development

The principal threats that undermine the food security potential of fisheries and aquaculture result principally from poor management and poor conservation of habitats. Both have serious impacts on human well-being, food security and poverty alleviation and undermine the pillars of sustainable development.

The forthcoming gathering in Rio, 20 years after the Earth Summit, is a unique chance to revisit, re-emphasize and reinforce commitments to achieve sustainable fisheries and aquaculture. This opportunity, strengthened by the dual focus of Rio+20 – a push for a green economy and an agreed institutional framework – could jettison the global community into action towards real sustainable and responsible use of aquatic resources and a more equitable distribution of the benefits from those resources

### What steps beyond Rio+20?

A transition toward people-centered approaches is required to enhance the sector's contribution to nutrition and food security and nutrition, poverty reduction and securing sustainable fisheries livelihoods. The steps needed to build towards and achieve this goal include:

- *Increase the social and economic resilience of fishing communities.* Improving governance and adopting a holistic approach to supporting livelihoods will strengthen their ability to adapt to climate change, reduce vulnerabilities to disasters, and face other global challenges.
- *Strengthen and develop capacity.* Fishers and aquaculturists, especially small-scale producers, need help in forming groups to boost their negotiating power, to gain better access to market information and improve competitiveness but also to increase their participation in management and decision-making processes.
- *Apply the ecosystem approach to fisheries and aquaculture (EAF/EAA).* The EAF/EAA blends protection and conservation of ecosystems with fisheries and aquaculture management to provide food, income and livelihoods in a sustainable manner. It aims to produce and harvest fish to meet today's needs while ensuring such benefits for future generations.
- *Promote green economy policies.* Favour development and poverty reduction policies that explicitly take into account the environmental, social, and economic benefits of sustainable practices.
- *Improve research and knowledge.* Better baseline information and identification of key indicators will lead to stronger and more appropriate advice, policy formulation and decisions.
- *Boost governance.* Extend support to developing coastal states that do not have adequate financial and human resources to effectively implement international instruments governing the conservation and management of aquatic resources including the Code of Conduct for Responsible Fisheries and its related international plans of action and instruments.
- *Streamline use of development assistance and enhance partnerships between aid donors and recipients,* in line with the Paris Declaration on Aid Effectiveness. Participatory processes are vital and should include collaboration with governments, UN agencies, regional fishery bodies, intergovernmental groups and civil society organizations as well as linking with other existing activities and projects.

The prospect of fisheries and aquaculture to continue supplying highly nutritious food, livelihoods and a viable future for new generations is increasingly at risk – Rio+20 provides an important opportunity to redress the situation.

## The Code of Conduct for Responsible Fisheries

The Code reflects the reality that if there is to be enough fish for future generations, everyone involved in fishing must help conserve and manage the world's fisheries. The Code:

- Is a collection of principles, goals and elements for action to ensure fisheries are sustained for future generations
- Calls for collaboration among countries and all those involved in fisheries and aquaculture to conserve and manage fish resources and their habitats
- Is voluntary, implemented by governments with technical support from FAO and other assistance agencies
- Was developed jointly by FAO, inter-governmental organizations, the fishing industry and non-governmental organizations
- Was adopted in 1995 by more than 170 FAO member countries and provides therefore an agreed upon basis for action
- Is currently being complemented by the development of international guidelines on securing small-scale fisheries that support hundreds of millions of livelihoods and are critical for food and nutrition security and poverty alleviation

## FAO – core work on fisheries and aquaculture

Building on its global expertise and neutrality, FAO's Fisheries and Aquaculture Department promotes sustainable development of fisheries and aquaculture in inland and marine waters worldwide, underpinned by the need for responsible management. Its focus is on strengthening global governance and the managerial and technical capacities of Members, improving the conservation and utilization of aquatic resources and empowering people, especially women. The Department does this by:

- Collecting, analyzing and disseminating information
- Providing technical advice and a neutral forum for the negotiation of international agreements and standards on responsible governance and sustainable practices of fisheries and aquaculture
- Assessing and monitoring the state of wild fishery resources and providing management advice
- Monitoring and advising on development and management of aquaculture
- Undertaking socio-economic analyses and helping develop policies and strategies for enhancing the contribution of fisheries and aquaculture for poverty alleviation and food security, and the progressive realization of the Right to Food.