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FISH FOR FOOD AND AQUACULTURE



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ABSTRACT:

Some 80 percent of the world's fish production is used for human consumption. The rest is mostly processed into fishmeal and fish oil. The number of people who are directly engaged in the primary production of fish either in capture from the wild or in aquaculture reached 44.9 million in 2008. In the last three decades the number of fishers and fish farmers has grown faster than the world's population and employment in traditional agriculture.

KEYWORDS: food and aquaculture, traditional agriculture.

INTRODUCTION

As vast as the world's oceans may seem, their resources are limited and their ecosystems fragile. FAO believes that they can be protected and conserved with careful and responsible stewardship. The Organization is committed to helping countries manage fisheries and aquaculture more effectively and to ensuring that fish continue to be a significant source of food, livelihood and trade for future generations.

GLOBAL IMPORTANCE OF A GROWING SECTOR

Fish is an excellent source of animal protein and a wide range of essential nutrients and contributes significantly to food security. In 2008, humans consumed about 80 percent of the world's fish production -17.1 kilos per person - and by 2030 consumption is expected to rise to as much as 20 kilos each year. The other 20 percent is mostly processed into fishmeal and fish oil.

The global supply of fish and fish products reached 142.3 million tonnes of fish and fish products in 2008, including a record 10 million tonnes from inland waters and 52.5 million tonnes from the steadily increasing aquaculture sector. If overall production is to keep pace with an expanding world population, and if capture fisheries are to remain stagnant, future growth will have to come from aquaculture.

Fisheries and aquaculture, directly or indirectly, play an essential role in the livelihoods of millions of people around the world, from the small-scale inland fishers who harvest fish from lakes and rivers to the men and women who work in large processing plants. Taking family members and other dependents into account, almost 540 million people, or nearly 8 percent of the world population, rely on the sector for their livelihoods.

MEETING RESPONSIBLE FISHERIES CHALLENGES

In 1995, FAO member countries adopted the Code of Conduct for Responsible Fisheries, which sets out principles and methods applicable to all aspects of fisheries and aquaculture. The code outlines ways to achieve the sustainable development and management of fisheries and aquaculture. FAO has developed four

international plans of action dealing with seabirds, sharks, fishing capacity and illegal, unreported and unregulated (IUU) fishing to support the code. Two special strategies have been designed to improve data collection and monitoring systems for both capture fisheries and aquaculture. A series of technical guidelines, intended to help translate the code's principles into action, further promote the code's implementation.



FAO project helps Tunisian women earn a living harvesting clams.

ACTING ON GLOBAL ISSUES FIGHTING ILLEGAL, UNREPORTED AND UNREGULATED (IUU) FISHING

IUU fishing today is recognized as a major threat to achieving sustainable fisheries. However, trade-based measures are increasingly being used to prevent IUU-sourced fish and fish products from entering international trade flows. These consist of the banning of products originating from IUU fishing that are thought likely to undermine fishery conservation and management measures, or rejecting individual shipments that cannot document their legal provenance. With as much as 37 percent of the global fish harvest entering into international trade circuits, measures that ensure that internationally traded fish does not originate from IUU fishing can be powerful instruments.

ECOSYSTEM APPROACH TO FISHERIES

Fisheries and aquaculture management has moved towards sustainability policies, leading to wider acceptance of the ecosystem approach to fisheries (EAF), an integrated approach for balancing societal objectives with real fishery resources and their natural and human environments. Ensuring inclusion of the human dimension to the EAF can provide an effective vehicle for addressing the wide range of complexities that affect fisheries management.

PRESERVING INLAND FISHERIES

Inland fisheries, although often undervalued, are a core component in the livelihoods of millions in both developing and developed countries. Some 61 million people are involved in the sector – over half of them women. Although in 2008 inland fisheries produced a record 10 million tonnes of fish, these fisheries resources are now threatened by irresponsible practices and habitat degradation. Enhanced awareness and appropriate action are required in order to conserve aquatic ecosystems and safeguard fishery resources.

FISHERIES AND AQUACULTURE INFORMATION

As the world's principal repository of global fishery statistics, FAO is a recognized authority on fisheries and aquaculture information. It compiles, collates, analyzes and integrates fishery and aquaculture data and information, creating a range of information products that are relevant, timely and easily available to users (in print and electronically). These include:

- ▶ fisheries and aquaculture factsheets: a rich source of information on fish species, fishery resources, fishing vessels, gear and equipment, country profiles and regional fishery bodies;
- ► FAO Yearbook of Fishery and Aquaculture Statistics: a compilation of data on capture production, aquaculture production, commodities and international trade and consumption;
- ► FISHINFO Network: a group of seven intergovernmental and governmental

organizations plus FAO's GLOBEFISH marketing and trade information services bring together buyers and sellers at international conferences, offer up-to-date information on markets and price trends and provide training in food quality standards;

- ► The State of World Fisheries and Aquaculture (SOFIA): published every two years, this comprehensive document provides a global overview of the world's capture fisheries and aquaculture;
- ▶ Web-based fishery and aquaculture statistics, databases and specially designed software that are freely distributed for data handling and dissemination.

Percentage of stocks assessed 50 40 30 Underexploited + moderately exploited Fully exploited Overexploited + Depleted + Recovering

Global Trade in the state of World marine stocks since 1974

Many fish stock monitored by FAO are under pressure from overfishing Source : SOFIA 2010

Million tonnes 160 140 China World excluding China 120 100 80 60 40 20 50 55 60 85 70 75 80 85 90 95 00 05 08

World capture fisheries and aquaculture production

Global fish production from capture fisheries and aquaculture is currently the highest on record – more than 142.3 million tonnes in 2008.

CONCLUSION

Fish and fish products reached a record US\$102 billion dollars in exports in 2008, with further growth expected. In developing countries, fishery net-exports (exports minus imports) are higher than those for other agricultural commodities including coffee, tea, rice and bananas.

- ▶ Some 53 percent of the world's marine fishery resources are fully fished, or fished to the maximum sustainable level. Another 32 percent is overfished, depleted, or recovering from depletion.
- Fish contributes to food security in many regions of the world. Numerous developing countries rely on fish as a major source of protein; in 28 of them, fish accounts for over 40 percent of animal protein intake.
- ▶ Since 1970, fish production from aquaculture has increased at an average annual rate of 6.6 percent. With production reaching 52.5 million tonnes in 2008, aquaculture will soon overtake capture fisheries as a source of

food fish.

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