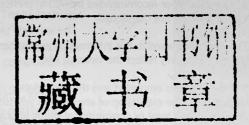




THE STATE OF WORLD FISHERIES AND AQUACULTURE

2012



FAO Fisheries and Aquaculture Department

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS Rome, 2012

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FOREWORD

Today, the global community faces multiple and interlinked challenges ranging from the impacts of the ongoing financial and economic crisis to greater climate change vulnerabilities and extreme weather events. At the same time, it must also reconcile meeting the pressing food and nutrition needs of a growing population with finite natural resources. This edition of *The State of World Fisheries and Aquaculture* shows how these issues affect fisheries and aquaculture sector and how the sector is attempting to address them in a sustainable manner.

Fisheries and aquaculture make crucial contributions to the world's well-being and prosperity. In the last five decades, world fish food supply has outpaced global population growth, and today fish constitutes an important source of nutritious food and animal protein for much of the world's population. In addition, the sector provides livelihoods and income, both directly and indirectly, for a significant share of the world's population.

Fish and fishery products are among the most traded food commodities worldwide, with trade volumes and values reaching new highs in 2011 and expected to carry on rising, with developing countries continuing to account for the bulk of world exports. While capture fisheries production remains stable, aquaculture production keeps on expanding. Aquaculture is set to remain one of the fastest-growing animal food-producing sectors and, in the next decade, total production from both capture and aquaculture will exceed that of beef, pork or poultry.

However, in a world in which almost a billion people still suffer from hunger, it is the poor, especially those in rural areas, who are most vulnerable to the combination of threats outlined above. In many areas of sub-Saharan Africa and South Asia, their fish consumption levels remain too low and they are failing to benefit from the contributions that fisheries and aquaculture are increasingly making elsewhere in terms of sustainable food security and income.

The vital contributions from fisheries and aquaculture to global food security and economic growth remain constrained by an array of problems. These include poor governance, weak fisheries management regimes, conflicts over the use of natural resources, the persistent use of poor fishery and aquaculture practices, a failure to incorporate the priorities and rights of small-scale fishing communities, and injustices relating to gender discrimination and child labour.

The recent United Nations Conference on Sustainable Development, known as Rio+20, discussed these governance-related issues and served as a platform to renew political commitment for sustainable development, assess progress and gaps in the implementation of existing commitments, and address new challenges. Two themes underpinning Rio+20 – the institutional framework for sustainable development and the support of a green economy – were reflected in FAO's main message that improved management and efficiencies throughout the food value chain can increase food security while using fewer natural resources, i.e. achieve more with less. A special focus on oceans and coasts at Rio+20 enabled FAO to voice its recommendations on questions ranging from improving the sustainable use of marine and coastal resources through to poverty eradication, small-scale fisheries and aquaculture operations, as well as the potential contribution of small island developing States.

Promoting sustainable fishing and fish farming can provide incentives for wider ecosystem stewardship. The greening of fisheries and aquaculture requires recognition of their wider societal roles within a comprehensive governance framework. There are several mechanisms to facilitate this transition, including

adopting an ecosystem approach to fisheries and aquaculture with fair and responsible tenure systems to turn resource users into resource stewards.

In addition to the efforts of government institutions, enabling fisheries and aquaculture to flourish responsibly and sustainably requires the full involvement of civil society and the private sector. Business and industry can help develop technologies and solutions, provide investment and engender positive transformation. Civil society and international and local non-governmental organizations can hold governments accountable on agreed commitments and ensure that the voices of all stakeholders are heard and represented.

Efforts to foster good governance for responsible and sustainable fisheries and aquaculture should include widespread adoption and implementation of the principles enshrined in the Code of Conduct for Responsible Fisheries, as well as of the provisions of the international guidelines currently under development for securing sustainable small-scale fisheries. It is also necessary to ensure the uptake and application of relevant international instruments, in particular the 2012 Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests, and to provide support to initiatives such as the GEF/FAO Global Sustainable Fisheries Management and Biodiversity Conservation in Areas Beyond National Jurisdiction, the World Bank's Global Partnership for Oceans and the UN Secretary-General's Ocean Compact.

To ensure that ecological well-being is compatible with human well-being, and to make long-term sustainable prosperity a reality for all, it is necessary to strike the right balance between seizing opportunities and addressing threats in the use of technology and natural resources, in applying sound economic and policy decisions and in preserving environmental integrity and social licence.

It is my sincere hope that this issue of *The State of World Fisheries and Aquaculture* will serve as a useful reference work on the sector – its status, trends, issues and outlook – and that it will contribute to a more complete understanding of the sector's key role in shaping our world.

Árni M. Mathiesen
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For Part 3, Highlights of special studies, contributors included:

A. Gudmundsson and J. Lincoln (effects of fisheries management policies on fishing safety); J. Ryder, L. Ababouch and I. Karunasagar (food safety in food and nutrition security); J. Sanders (marine protected areas); M. Hasan (aquafeed and feed ingredients for farmed fish and crustaceans); D. Bartley, W. Emerson, L. Ababouch and R. Subasinghe (guidelines on ecolabelling and certification); and S. Vannuccini and A. Lem (OECD–FAO Agricultural Outlook: fish).

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The FAO Fisheries and Aquaculture Department, under the overall supervision of T. Farmer and with assistance from J. Plummer, coordinated the editing, design and production of *The State of World Fisheries and Aquaculture 2012*.

ABBREVIATIONS AND ACRONYMS

CAC

Codex Alimentarius Commission

CACFISH

Central Asian and the Caucasus Fisheries and Aquaculture Commission

CBD

Convention on Biological Diversity

CCA

climate change adaptation

CCAMLR

Commission for the Conservation of Antarctic Marine Living Resources

CCSBT

Commission for the Conservation of Southern Bluefin Tuna

CDS

catch documentation scheme

CECAF

Fishery Committee for the Eastern Central Atlantic

CIFAA

Committee for Inland Fisheries and Aquaculture of Africa

CITES

Convention on International Trade in Endangered Species of Wild Fauna and Flora

CODE

Code of Conduct for Responsible Fisheries

COFI

FAO Committee on Fisheries

COP

Code of Practice

COREP

Regional Fisheries Committee for the Gulf of Guinea

CPUE

catch per unit of effort

DRM

disaster risk management

DRR

disaster risk reduction

EAA

ecosystem approach to aquaculture

EAF

ecosystem approach to fisheries

EC

European Commission

ECOSOC

United Nations Economic and Social Council

EEZ

exclusive economic zone

EIFAAC

European Inland Fisheries and Aquaculture Advisory Commission

EIFAC

European Inland Fishery Advisory Commission

FCR

feed conversion ratio

FCWC

Fishery Committee for the West Central Gulf of Guinea

GFCM

General Fisheries Commission for the Mediterranean

GHG

greenhouse gas

HACCP

Hazard Analysis and Critical Control Point (system)

HFA

Hyogo Framework for Action

HUFA

highly unsaturated fatty acid

IATTO

Inter-American Tropical Tuna Commission

ICCAT

International Commission for the Conservation of Atlantic Tunas

IMO

International Maritime Organization

IOTC

Indian Ocean Tuna Commission

ISO

International Organization for Standardization

ITQ

individual transferable quota

IUU

illegal, unreported and unregulated fishing

LDC

least-developed country

LIFDO

low-income food-deficit country

LIFE

low-impact fuel-efficient

LOA

length overall

MDG

Millennium Development Goal

MPA

marine protected area

NAFO

Northwest Atlantic Fisheries Organization

NASCO

North Atlantic Salmon Conservation Organization

NEAFC

North East Atlantic Fisheries Commission

NEL

not elsewhere included

NGO

non-governmental organization

NOAA

National Oceanic and Atmospheric Administration (the United States of America)

NPAFC

North Pacific Anadromous Fish Commission

OECD

Organisation for Economic Co-operation and Development

OSPESCA

Organization of Fishing and Aquaculture in Central America

PERSGA

Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden

RFB

regional fishery body

RFMO

regional fisheries management organization

R&D

research and development

SAR

search and rescue

SEAFO

South East Atlantic Fisheries Organisation

SIOFA

Southern Indian Ocean Fisheries Agreement

SPRFMO

South Pacific Regional Fisheries Management Organisation

SPS AGREEMENT

Agreement on the Application of Sanitary and Phytosanitary Measures

SWIOFC

Southwest Indian Ocean Fisheries Commission

TBT AGREEMENT

Agreement on Technical Barriers to Trade

UNGA

United Nations General Assembly

WCPFC

Western and Central Pacific Fisheries Commission

WHO

World Health Organization

WTO

World Trade Organization

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PART 1

WORLD REVIEW OF FISHERIES
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