

The marine fisheries of Cambodia

Based on the work of

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Food and Agriculture Organization of the United Nations
Rome, 2004

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FOREWORD

This document is a slightly revised and edited version of a review mission report on the marine fisheries of Cambodia. The mission took place in early 2003 and was organized under the FAO FishCode Programme at the request of the Ministry for Agriculture, Forestry and Fisheries of the Royal Government of Cambodia. Funding was provided through FishCode component project GCP/INT/648/NOR, "Management for Responsible Fisheries." Fieldwork was carried out in collaboration with three senior staff of the Cambodian Department of Fisheries, who provided valuable assistance and advice: Messrs Ing Try, Ouk Vibol and Poup Sotha. The FAO Representative in Cambodia, Mr Jean-Claude Levasseur and his staff also provided efficient support and much appreciated encouragement.

The FishCode Review series publishes results of studies, missions, consultations, workshops, meetings and other project activities undertaken through the Programme, in furtherance of its objective of facilitating implementation of the 1995 FAO Code of Conduct for Responsible Fisheries and related international fisheries instruments and plans of action. Individual numbers in the series are distributed to appropriate governments, regional bodies, meeting participants and Programme partners. Further information on Programme background, publications and activities is available through www.fao.org/fi/fishcode.

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**FAO/FishCode Review No. 4,
Distribution:**

Cambodia Department of Fisheries
RAP
FI Divisions and Services
FI Branch Library

Gillett, R.
The marine fisheries of Cambodia.
FAO/FishCode Review. No. 4. Rome, FAO. 2004. 57p.

ABSTRACT

This review of the marine fisheries of Cambodia is based on in-country mission work carried out in early 2003 in order to: (a) describe the marine fishery sector; (b) identify opportunities, constraints, and paths to solutions for the sector; and (c) identify areas for follow-up investigation.

Excess fishing effort and associated declines in abundance of target species are the most serious problems facing Cambodia's marine fisheries. The major causes appear to be population increases coupled with a sluggish economy and the government's open access policy. This review endorses the findings of other studies of Cambodia's marine fisheries in concluding that resource sustainability requires restrictions on resource access. Much capacity building is also required for the effective management of marine fisheries in Cambodia. A suite of initiatives is proposed for addressing these problems and promoting the transition to responsible fisheries.

Keywords: Fishery management; marine fisheries; Southeast Asia; Cambodia.

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
AFSC	American Friends Service Committee
APIP	Agriculture Productivity Improvement Project of the World Bank
ASEAN	Association of Southeast Asian Nations
CBD	Convention on Biological Diversity
CFDO	Community Fisheries Development Office
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPUE	Catch per unit of effort
CSIRO	Commonwealth Scientific and Industrial Research Organization
DANIDA	Danish International Development Agency
DoE	Department of Environment
DoF	Department of Fisheries
EC	European Commission
EEZ	Exclusive Economic Zone
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GEF	Global Environment Facility
HACCP	Hazard Analysis and Critical Control Point
ICFC	International Development Research Centre
ICLARM	International Center for Living Aquatic Resource Management
IDRC	International Development Research Centre
INFOFISH	Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia-Pacific Region
KAMFIMEX	Kampuchea Fish Import and Export Company
MAFF	Ministry of Agriculture, Forestry and Fisheries
MARPOL	International Convention of the Prevention of Pollution from Ships
MCS	Monitoring, Control and Surveillance
MRC	Mekong River Commission
MSY	Maximum Sustainable Yield
NGO	Non-Governmental Organization
SEAFDEC	Southeast Asian Fisheries Development Center
TAC	Total Allowable Catch
TCP	FAO Technical Cooperation Programme
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
VMS	Vessel Monitoring System

1. INTRODUCTION

In July 2002 the Food and Agriculture Organization of the United Nations (FAO) received a request from the Acting Minister for Agriculture, Forestry and Fisheries of the Royal Government of Cambodia for a review of Cambodia's marine fisheries and their management. FAO responded through its FishCode Programme by sending a fisheries specialist to Cambodia for a four-week period in February and March 2003, followed by a week of reporting.

The fisheries specialist was specifically requested to: (a) describe the marine fisheries; (b) identify opportunities, constraints, and paths to solutions; and (c) identify areas for follow-up investigation. To carry out this work, the specialist had discussions in Phnom Penh with senior Department of Fisheries (DoF) officials and travelled with them along the coast to Kep, Kampot, Sihanoukville, and Koh Kong. A list of DoF and other Government officials, fishers, and stakeholders interviewed in Cambodia is given in Appendix 1.

Much of the information given in this report, and indeed in many of the studies of marine fisheries in Cambodia, relies to some extent on the statistics produced by the Department of Fisheries. The rudimentary nature of the statistical system for marine fisheries, the fact that fish are not landed at a central location, the direct transshipment/export, direct exports of fish to foreign vessels, and other factors all contribute to inaccuracies. The landing data for marine fisheries given in this report should therefore be treated with caution and only be considered as indicative at best.

2. GENERAL DESCRIPTION OF THE MARINE FISHERIES OF CAMBODIA

The coast of Cambodia is located along the Gulf of Thailand from the Thai border in the northwest to the Vietnamese border to the southeast. The coastal area includes several large bays and extends across the provinces of Koh Kong and Kampot and the municipalities of Sihanoukville and Kep. The offshore marine area contains numerous islands. The Exclusive Economic Zone (EEZ) covers approximately 55 000 km² and is relatively shallow with an average depth of about 50 metres.

The March 1998 census indicated that the population of the two coastal provinces and two coastal municipalities was about 840 000 people, or about seven percent of the population of Cambodia. Although the population density in the coastal provinces is low in comparison to other parts of the country, the number of people in coastal areas increased by about 25 percent in the five-year period ending in 1998. Touch and Todd (2002) estimated that about 10 000 people are involved in the marine fishery sector, which comprises fishing, gathering, processing and marketing.

In accordance with the present fishery law, the "marine fishery domain" extends from the coastline to the outer boundary of the economic zone. A recent study (Try, 2003) estimated that about 5 000 motorized fishing vessels operate in this area and that average marine capture fishery landings are about 44 000 mt per year. FAO (1999) indicates that the Gulf of Thailand is among the most productive fishing grounds in the world and APIP (2001b) states that Cambodia's coastal area is the most productive in the Gulf. For several reasons, Cambodia's catches in the Gulf are low per unit compared to those of neighbouring Thailand and Viet Nam.

Some of the main features of the coastal area of importance to fisheries are summarized in Table 1 below. The coastal area of Cambodia is shown in Figure 1.

Table 1. Some features of the coastal area of importance to fisheries

Province – municipality	Length of coastline ¹ (km)	Number coastal villages ²	Number motorized vessels (2001) ³	Marine capture fisheries landings (2001) ⁴ (mt)
Kep	26	7	192	470
Kampot	68.5	23	416	8 100
Sihanoukville	119.5	35	1 278	17 600
Koh Kong	237	127	3 425	17 400
Total	451⁵	192	5 311	43 570

The marine component of the fisheries sector in Cambodia is not nearly as important as that of the inland areas. Reasons for this include a consumer preference for inland fish species and the relatively small fish production from marine areas, which is about one-tenth of all fish production.

Lamberts (2001) gives seven estimates of the contribution of fisheries (inland and marine) to Cambodia's gross domestic product (GDP). The specific contribution of marine fisheries to GDP has not been assessed accurately and would require a good estimate of production, the value of that production at the producer level, and an estimate of the value added by the producer (Gillett and Lightfoot, 2002).

There have been major changes in Cambodia's marine fisheries during the past decade, including:

- an increase in total catch which, according to the DoF statistical system, has risen from 36 400 mt in 1991 to 42 000 mt in 2001;
- the rise and fall of shrimp aquaculture in the 1990s;
- increased use of trawling gear by small vessels in inshore areas;
- an apparent increase in fishery-related conflicts, mainly involving interaction between users of different types of fishing gear;
- the decline of some important commercial fisheries and associated processing industries; and
- interest by Government agencies, donors, and NGOs for supporting community involvement in management of coastal resources.

¹ According to information supplied by local fisheries officers during the present study.

² Idem.

³ According to information in Try (2003).

⁴ Idem.

⁵ A coast of 435 km is often quoted in Department of Fisheries documents; this apparent discrepancy could easily result from different methods of calculating coastline, such as determining the coastline around the mouths of rivers.



Figure 1. The coastal area of Cambodia (from Try, 2003)