

# Guidelines for the routine collection of capture fishery data

FAO  
FISHERIES  
TECHNICAL  
PAPER

382



**DANIDA**

Food  
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Agriculture  
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Prepared at the  
FAO/DANIDA Expert Consultation  
Bangkok, Thailand, 18-30 May 1998

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Rome, 1998

## PREPARATION OF THIS DOCUMENT

The FAO/DANIDA Project "Training in Fish Stock Assessment and Fishery Research Planning" has organized training courses on fish stock assessment and workshops dealing with the assessments of specific resources in many countries. The general experience has been that in many cases proper assessments were difficult to achieve due to restrictions in the available data, both in quality and quantity.

In August 1997 at its first session, the APFIC Joint Working Party on Fishery Statistics and Economics recommended that APFIC and FAO should prepare "draft guidelines on methodologies and standards for the collection of production and structural statistics for capture fisheries".

On this basis it was decided to form an informal inter-departmental working group to organize an Expert Consultation on Routine Data Collection and a Regional Workshop to allow experts from Asia to review the draft guidelines on the collection of data from marine and inland fisheries. Chapters of the guidelines were written prior to the Expert Consultation, but during the meeting most of these manuscripts were re-arranged and simplified.

This document was designed and written from 18 to 30 May 1998 in Bangkok, Thailand by a group of experts with a variety of skills in anthropology, biology, economics, data processing and statistics:

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The guidelines were reviewed by participants at the Regional Workshop, in Bangkok, from 25 to 29 May 1998.

Further refinement of the document through editing or additional material was provided by the following people:

Patricia Clay, Adele Crispoldi, Peter Flewwelling, Serge Garcia, Luca Garibaldi, Richard Grainger, Paul Medley, Sean Pascoe, Siebren Venema and Rolf Willmann.

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Cover picture: Sampling in Viet Nam by Per Sparre

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### **ABSTRACT**

These guidelines aim to help those who design routine data collection programmes, focusing on the relationship between typical questions asked by policy-makers and managers, and the data required for providing reliable answers. Fisheries policy and management objectives, particularly under the precautionary approach, need to be based upon analyses of reliable data. Data are needed to make rational decisions, evaluate the fisheries performance in relation to management activities and fulfil regional requirements. These objectives are achieved using fishery performance indicators. Indicators are used to measure the state of the resource, the performance of fishing controls, economic efficiency, socio-economic performance and social continuity. The primary factor in choosing what data to collect is the link between the necessary operational, biological, economic and socio-cultural indicators and their associated variables. The way in which different data variables are collected needs to be tailored to the structure of the fishery. The strategy will be strongly influenced by the budget and personnel available, and the degree to which fishers and others co-operate. The programme must identify which variables should be collected through complete enumeration and which can be sampled. Collection methods are influenced by the variable itself, the strategy, collection point and the skill of the enumerator. Once collected, fishery data must be stored securely, but made easily available for analysis, which is achieved through a computer-based data management system, following the basic data processing principles. The implementation of a data collection programme should follow a normal project cycle, developing a new legal and institutional framework as appropriate.

#### **Distribution:**

All FAO Members and Associate Members  
DANIDA  
Participants (Expert Consultation and Regional Workshop)  
All FAO Offices  
FAO Fisheries Projects  
FAO Fisheries Department  
Other interested Nations, International Organizations and NGOs

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