

Framework for Valuing Fisheries Resource Use

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OBJECTIVES

1. To develop an agreed framework to measure the economic value of fisheries resources in different uses.
2. To identify the data required to apply the framework.
3. To present the framework, data requirements and analytical methods in a user-friendly handbook for use by fisheries managers, researchers and other relevant parties.
4. To promote and explain the use of the framework through a series of workshops around the nation.

The output of this project is the book edited by T. Hundloe “Valuing Fisheries: An Economic Framework” published by The University of Queensland Press, 2002, plus a number of seminars around the country based on the book. It is too early yet to ascertain if there have been any outcomes; that is, there is no evidence that allocation decisions made since the book was published have used the proper economic framework – on the other hand there is no evidence that allocation decisions have been made using flawed economic arguments.

NON TECHNICAL SUMMARY

Humans have been fishing for food and pleasure since time immemorial. Long before the development of powerful commercial fishing vessels, tribal communities sought fish and other marine life for food and ceremonial purposes. Today, there is a significant tourism sector around diving and snorkelling.

Commercial and recreational fisheries often compete for the same fish stock. Together these two groups compete with those who wish to promote a ‘look but don’t take’ attitude to fish. And in some cases, traditional indigenous fishers have special demands that can be inconsistent with the needs of other groups.

The limited nature of fish stocks can lead to arguments between these different groups where access to the resource becomes competitive. Too often the resource access debates are resolved using incomparable economic data. Further, access to and sharing of fisheries resources need not necessarily be based on economic data and principles, but if they are, the proper approach must be used.

To address this need, the FRDC initiated a workshop that was held in conjunction with ABARE’s outlook conference in 1997. The workshop identified the process for developing a product that would meet end-user’s needs and provide for an “apples with apples” guide to resource allocation. The workshop identified a Fisheries Economic Statistics Working Group to

take the lead on this issue. The working group comprised representation and expertise from ASIC, Recfish Australia ABARE etc.

One of the early products developed by the working group was “From Antarctic to the Tropics: A snapshot of the Australian fishing industry”. This snapshot uses the data from the annual Australian Fisheries Statistics produced by ABARE and has become a biennial production by the FRDC and launched at each Seafood Directions.

The primary product of this project was the publication “Valuing Fisheries: An Economic Framework”. This publication was published by The University of Queensland Press, 2002 (University Of Queensland Press, Staff House Road (PO Box 6042) ST LUCIA QLD 4067. General Enquiries Number (+61 7) 3365 2127 website <http://www.uqp.uq.edu.au/>).

The methods involved commissioning chapters from experts in the fields of resource economics. The resultant book sets out in clear language, with simple examples, the correct economic method to be used in allocation of fisheries resources.. The aim is to improve decision-making so that everyone can enjoy a seafood meal, drop a line in the water or observe fish in a natural environment without unnecessary conflict.

The book shows that arguments between commercial and recreational fishermen that 'my fish is worth more than your fish' are nearly always based on false notions of economic value and it outlines what economic approaches should be used. However, the book is about much more than just valuing recreational and commercial fishing. It presents approaches for understanding and incorporating the value of indigenous peoples' fishing rights into fisheries management. This is a critical issue for the future management of fisheries for all Australians

Keywords

fishing, economic, seafood, commercial, recreational, fish, fishers

ACKNOWLEDGMENTS

Senator Ian Macdonald is warmly thanked for taking time out to launch the book at the Sydney Fish Market.

BACKGROUND

Managing the marine environment involves issues of resource-sharing between competing uses of the environment (commercial versus recreational fishing, fishing versus preservation, traditional fishing versus other uses, and so on).

Without an agreed approach (methodology) to the measurement of economic value there have been major public disputes, considerable waste of resources by all parties and the tax-payers (through government expenditure), and in all probability serious misallocation of fisheries resources.

The 1997 Workshop, the Steering Committee and representatives of the major sectors identified the need to address these issues as a very high priority. Failure to address these issues would have resulted in a continuation of fruitless and unresolvable disputes between the sectors.

The issue of allocation of marine resources both within and between sectors was an important plank of the Oceans Policy. The objective of the National Oceans Policy is to provide a framework for the planning, management and ecologically sustainable development of Australia's ocean resources. This project has responded directly to the needs identified by this policy.

In the context of the Oceans Policy, the Marine Science and Technology Plan identified the need for much improved economic statistics and data for fisheries management by which to properly compare uses for the marine environment.

The Steering Committee identified issues associated with valuation as a high priority area, requiring immediate attention if Australian Fisheries Statistics were to be improved. This work was essential to identifying the gaps in economic data on the seafood industry and ensuring consistency in valuation techniques across the different uses of fisheries resources.

A related need, which underpins debates in relation to the valuation of alternative use of fisheries resources, was that many fisheries economists work in isolation from others in the field. As a consequence, there is often not the level of intellectual rigour in development of analysis and in interpretation of results that exists in other, similar areas, such as fish biology, where peer review is provided through the Australian Society of Fish Biologists, underpinned by an annual conference.

To address the issues in relation to research quality management and consistency of approach it was considered necessary to address the issue of identifying appropriate peer review opportunities.

The International Institute of Fisheries Economics and Trade (IIFET) was identified as potentially providing such support, through its biennial conferences and Australian representation.

METHODS

The Process

The February 1997 Workshop

The project was the result of the recommendations of the Economic Statistics Workshop held on 6-7 February 1997, at the Brassey Hotel, Canberra, organised by FRDC (see Proceedings published by Cook Wass and Associates Pty Ltd).

The application

A funding application was subsequently prepared by Professor Tor Hundloe of The University of Queensland. In developing the project, Professor Hundloe contacted all major stakeholders (including CEOs of state/territory fisheries management agencies). All supported the project.

Selecting expert consultants

The next stage involved Professor Hundloe and the Economic Statistics Working Group Committee selecting a number of potential expert consultants to be invited to tender to prepare aspects of the research report.

The following experts were selected by the Committee:

- (i) Dr Russell Blamey, responsible for recreational fisheries
- (ii) Mr David Campbell, responsible for the economics of traditional fishing
- (iii) Dr Dermot Smyth, responsible for the anthropological aspects of traditional fishing
- (iv) Mr Marc Carter and Ms Leanne Wilkes, responsible for “no take” fishing
- (v) Ms Paula Holland (ABARE) responsible for commercial fishing

Review of consultants’ reports

When the experts’ contributions were completed they were sent for peer review. The reviews were forwarded to the consultants and necessary changes were made. Professor Hundloe oversaw this process.

Following the completion of the experts’ reports, Professor Hundloe wrote the first seven chapters of the book, (in user-friendly language) plus edited the experts’ contributions which made up the remainder of the manuscript. The manuscript was prepared as “A Draft for Consultation”.

The Draft was used in a series of workshops around Australia, including Perth, Adelaide, Melbourne, Sydney, Brisbane and Wellington, N.Z.

Review of the manuscript

Fisheries managers, fishers (both commercial and recreational) and other interested parties attended these workshops. Relevant comments were noted and taken into account in rewriting the draft. A written review was provided by a New Zealand expert.

All members of the Economic Statistics Working Group Committee reviewed the Draft, as did staff of the FRDC. Written reviews were presented by most members.

Preparation of the book

After final editing by Professor Hundloe, the manuscript was submitted to The University of Queensland Press, Australia’s most successful academic publishers. The manuscript was accepted and the book was published in late 2002.

It was launched by the Federal Minister responsible for fisheries, The Hon. Senator Ian Macdonald. It is selling well.

PLANNED OUTCOMES

It is expected that over time, fisheries managers and those responsible for the allocation of fisheries resources will adopt the framework. This is something which cannot be forced upon them but rather involves an educative process.

Project 1998/137 “Case study for collection of economic data on commercial fishing” (Noel Taylor Moore) is linked to the national framework, as is project 2001/065 “Socio-economic valuation of allocation options between recreational and commercial sectors” (John Nicholls).