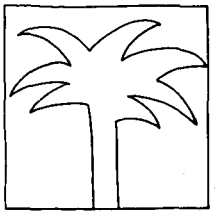

Book reviews

Economics of Fishery Management in the Pacific Islands Region

Proceedings of an international conference held in Hobart, Tasmania, 20–22 March 1989.
ACIAR Proceedings no.26, 169 pp.

An international workshop on the economics of fishery management in the Pacific islands region was held in March 1989 at the University of Tasmania. It was funded by the Australian Centre for International Agricultural Research (ACIAR) and organized by Dr Harry Campbell of the Department of Economics, University of Tasmania, and Dr Geoffrey Waugh of the Department of Economics, University of New South Wales. The purpose was to help design a program of economic research on fishery management issues to increase the contribution of fisheries to the regional economies of South Pacific. The present book consists of a diverse collection of papers presented by fishery specialists at the conference.

The papers are grouped under six headings, commencing with the tuna industry. This constitutes the major fishery resource of the Pacific islands and has been reinforced by the recent Law of the Sea and the emergence of 200 miles' exclusive economic zones. Because tuna fishery development is particularly expensive and cannot occur in isolation, island countries would be well advised to exploit opportunities for cooperation inside and outside the region to gain comparative advantage. The geography and oceanography of the tuna resources as well as the deceptive results of joint ventures negotiated with foreign partners up to now militate in favour of more effective regional cooperation.

The second section is devoted to the rules which regulate the exploitation of living marine resources and addresses the rights and obligations which result from the enforcement of the exclusive economic zones. A special case is made of individual transferable quotas that several countries have begun to implement to regulate access or improve management of marine resources. Limited duration distinguishes these rights from the sole property rights that still predominate in traditional coastal fisheries.

Section three discusses inshore fisheries. The inshore fishery resource of South Pacific islands is scarce, fragile and not well known. It is easily over-exploited once artisanal fishing is overtaken by commercial fishing; assessment is urgently needed. Small-scale fishing also presents specific cultural and social features which lead to divergent perspectives on their desirable management. Economic analysis needs to be centred on growth relevant to island communities which are less prone to accumulate than to share or redistribute their resources.

The fourth section addresses fishery marketing aspects from case studies. A preliminary analysis of prawn marketing in Papua New Guinea underlines the necessity

for more understanding of the domestic situation. A survey of changes in tuna consumption patterns in Japan highlights the need for accurate and flexible research able to cope with foreign markets. A model proposing a framework for the study of tuna markets is also proposed.

The fifth section looks at problems of fishery management and development: the growing over-exploitation of prawn fishing in the Gulf of Papua; the investigation of alternative tuna fisheries in the Western Pacific by South Australian operators; and the poor performances of national fishing fleets in the Pacific islands region. It also explains the present cautious approach to oceanic fisheries development in Vanuatu.

The book concludes by considering the most appropriate economic research for fisheries in the region. One perspective is illustrated by the presentation of a model setting priorities for fisheries research treated as an investment undertaken to maximize resource efficiency. Such arguments pointing out comparative advantage and rent maximization, are commonly shared by neo-classical theorists advocating free market economies and by neo-Keynesians proposing State intervention to correct market consequences. They are based on Western values even when presented as scientifically objective and value-free.

Another approach suggested by Brown and Waugh suggests an alternative model of development, taking into account cultural and social values still deeply rooted in Pacific island societies. The approach aims to minimize islands' vulnerability before maximizing efficiency. This strategy (which integrates economic, social and cultural values) seems to its proponents to be more realistic and scientific than ideal frameworks determined through models or algorithms. These are criticized not for their heuristic value but for their claim to explain what is 'really real'. The alternative approach seems more appropriate to artisanal inshore fishery than to industrial offshore fishery, which is largely extroverted and based on Western values.

By emphasizing rational logic of choice, neo-classical economists have given more rigour and precision to their answers. At the same time, they have excluded social and political issues which are crucial in developing countries. Few economists to date have focused on fishery problems in the South Pacific and it is highly desirable that more interest be taken in this field, especially if biological and social issues are to be addressed. However, they will have to take into account priorities and specific needs of individual island countries as was stated by attenders.

Gilles Blanchet

Policy Modelling in the Small Island Economies of the South Pacific: The Case of Vanuatu

Mark Sturton (1989)

(Honolulu: East–West Center), 151pp.

Mark Sturton has built two Social Accounting Matrices (SAM) based on macroeconomic models of the Vanuatu economy. His book explicitly describes two models and their capabilities in an easily understood and policy relevant manner. Despite the inherent data weaknesses involved in building computerized models of this kind for island countries, the exercises outlined illustrate the models' usefulness in analysing the impacts of economic policy. The first kind of model is a Semi-Input-Output short-run model while the other is a more flexible Computerized General Equilibrium variant. The latter requires more statistical inputs but provides richer insights by allowing market reactions to price signals. Both models apply sophisticated non-linear solution methods and solve iteratively, which means that the models can forecast outcomes on a year by year basis. Two interesting policy experiments are included: wage indexation and fiscal expansion. Wage indexation leads to unemployment and 'unsustainable' government and external accounts in both models. Fiscal expansion yields the same sort of results. Some sensitivity tests are applied to reveal some critical assumptions, but the comparative static results were maintained under the range of parameters tried.

The book underlines a significant point about policy modelling in the South Pacific. Many policy-makers scoff at the usefulness of formal modelling, arguing that judgement is a better guide due to the unforeseeable nature of disasters or fortuitous discoveries. It is true that modelling provides few clues to the prediction or impact of cyclones. On the other hand, as demonstrated in Sturton's work, a formal model can supplement policy-makers' judgement when analysing the potential effects of devaluation or wage indexation. By carefully identifying the assumptions and complex linkages, a model can single-out key variables or relationships. In this way scarce statistical, economic and political resources can be effectively used to better understand the economy. Policy models can provide powerful information to policy-makers during the process of making those crucial economic decisions. I look forward to seeing the next book in this series, which will describe a model of Fiji.

Ethan Weisman