### UNITED NATIONS RESEARCH INSTITUTE FOR SOCIAL DEVELOPMENT

DP 32

# FISHERIES MANAGEMENT IN THE PACIFIC: Tradition and the Challenges of Development in Marovo, Solomon Islands

by Edvard Hviding and Graham B.K. Baines

UNRISD Discussion Papers are preliminary documents circulated in a limited number of copies to stimulate discussion and critical comment.

March 1992

The United Nations Research Institute for Social Development (UNRISD) is an autonomous agency that engages in multidisciplinary research on the social dimensions of contemporary problems affecting development. Its work is guided by the conviction that, for effective development policies to be formulated, an understanding of the social and political context is crucial. The Institute attempts to provide governments, development agencies, grassroots organizations and scholars with a better understanding of how development policies and processes of economic, social and environmental change affect different social groups. Working through an extensive network of national research centres, UNRISD aims to promote original research and strengthen research capacity in developing countries.

Current research themes include: Crisis, Adjustment and Social Change; Environment, Sustainable Development and Social Change; Ethnic Conflict and Development; Social and Development Indicators; Political Violence and Social Movements; Refugees, Returnees and Local Society; Socio-Economic and Political Consequences of the International Trade in Illicit Drugs; and Participation and Changes in Property Relations in Communist and Post-Communist Societies.

A list of the Institute's free and priced publications can be obtained from the Reference Centre.

United Nations Research Institute for Social Development Palais des Nations 1211 Geneva 10 Switzerland

E-mail: info@unrisd.org World Wide Web Site: www.unrisd.org

#### ISSN 1012-6511

Copyright © United Nations Research Institute for Social Development (UNRISD). Short extracts from this publication may be reproduced unaltered without authorization on condition that the source is indicated. For rights of reproduction or translation, application should be made to UNRISD, Palais des Nations, 1211 Geneva 10, Switzerland. UNRISD welcomes such applications.

The designations employed in UNRISD publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of UNRISD concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by UNRISD of the opinions expressed in them.

### **Preface**

The importance of traditional resource management practices and local environmental knowledge for sustainable development has become increasingly clear in recent years. However, a key question is still outstanding: Can traditional resource management systems remain viable in the face of the modernization and commercialization of production systems, the increasing levels of resource exploitation caused by population pressures and integration into market systems, and the changes in social relations which these transitions imply? This paper addresses this question in the context of the fishing communities of Marovo Lagoon, Solomon Islands. It forms part of a larger UNRISD research programme on **Sustainable Development through People's Participation in Resource Management**, which also involves research on traditional management of rangelands, forests and water resources. The programme is being co-ordinated within UNRISD by Jessica Vivian.

The paper opens with a description of the complex and adaptive marine resource management system of Marovo, situating it within the context of other Pacific Island societies. What the authors term "customary marine tenure" is based on a concept of communal property, with rights of resource utilization--although not of individual ownership--based on kinship. Regulations are set by the community as a whole to govern who can extract marine resources from which area of the seabed, for what purpose, and at what time. The rules which are established are enforced through a variety of social and legal mechanisms, and historically have been able to maintain the productivity of the marine resource base by preventing overexploitation of any particular resource at any particular time.

As in most areas where traditional resource management practices have been successful in the past, Marovo is currently seeing changes which are testing the viability of this system. Commercialization has brought with it social and ecological drawbacks, and is also putting some strain on the customary tenure relationships--which were formulated originally to guarantee subsistence needs, and which perform less well in market-oriented production systems. The authors argue, however, that the system is proving adaptable, as local communities learn how to respond to new pressures. Marovo people are successfully addressing the challenge of accommodating commercial development within a customary framework. They are actively involved in the negotiation of rules governing not only their own resource extraction, but also have proved capable of influencing and restricting resource exploitation by outsiders.

Perhaps more importantly, the paper argues that some form of community management based on customary marine tenure is not only viable, but is also the best option for the management of lagoon and near shore marine resources: with the diverse species, rapidly changing stock levels, wide expanses of ocean and mobile fishing fleets of the region, enforcement of a centralized system of fisheries management would be impossible. Because customary fisheries management systems are able to provide for necessary stock rotation, periodic closures of areas to resource extraction and stock monitoring, the authors argue, there is every reason to work with and strengthen such systems. Only the involvement of the community will ensure that the development of marine resources will be undertaken in a sustainable manner.

Edvard Hviding is a Research Fellow at the Centre for Development Studies, University of Bergen, Norway. A social anthropologist, he has had a close involvement with Marovo and Solomon Islands since 1986 through several long periods of field research, focusing on past and present resource management practices and on local environmental knowledge. He has acted as a

consultant on matters of local-level fisheries management for regional agencies such as the Forum Fisheries Agency and the South Pacific Commission, and is presently engaged in a study for ICLARM (International Center for Living Aquatic Resources Management) on social, economic and legal aspects of coastal aquaculture in the Indo-Pacific region.

Graham Baines has spent many years in the Solomon Islands and other Pacific island countries where he has worked both with educational institutions and with government agencies in natural resource management and development planning. His interests now are focused on efforts to strengthen the capacity of traditional community institutions to manage the land and sea resources over which they have customary control. In this connection he is managing for WWF (International) a Solomon Islands community resource conservation project in which Marovo communities are involved.

March 1992

Dharam Ghai Director

## **Contents**

1.	Introduction	1
2.	People and fisheries management	1
3.	Marine tenure and fisheries management in the Pacific Islands	2
4.	Marovo society	3
5.	Traditional resource management in Marovo	4
6.	Customary marine tenure	5
7.	Gaining access to fishing grounds	6
8.	Multiple dimensions of marine tenure	8
9.	Gender, age and power in resource management	9
10.	Traditional environmental knowledge and its role in fisheries management	10
11.	Challenges from the outside world	11
12.	Sustainable development: People's initiatives for the future	14
References		17

### 1. Introduction

This paper, a commissioned study under the UNRISD Research Programme on Sustainable Development Through People's Participation in Resource Management, examines a case of traditional fisheries-related resource management; a case in which local people, from a basis of traditional, "common property" control over the sea and its resources handle a multitude of development issues. Presenting first some important issues relating to people's role in fisheries management and to the "common property" debate, we then describe a traditional system for management of land and sea resources in a Pacific Islands society--that of Marovo Lagoon, Solomon Islands. Emphasis is given to fisheries resources, with a view to explaining in practical terms how the customary marine tenure system operates under the social, political, economic and ecological circumstances of change arising from development pressures. Against this background, assessments are made of the viability of this traditional fisheries management system under present conditions of centralized political control and of both external and internal pressures for large-scale resource development enterprises.

The authors' Marovo experience, as expressed in this paper, lead them to conclude that effective people's participation is an essential prerequisite for fisheries development and that people's organisations built on local-level social systems, common property resource ownership and traditional fisheries knowledge are an appropriate basis for such participation.

## 2. People and Fisheries Management

The long-established biological emphasis in fisheries management has meant that the role of fishermen (and, even more so, fisherwomen), has largely been ignored. Yet the people, both those who fish and those who are otherwise involved in a fishery, contribute directly and significantly to the "fisheries systems" themselves. More recent approaches in fisheries ecology clearly recognize this (Larkin, 1978). Among fisheries managers at large, however, including fisheries economists, there has been a tendency to give a rather static role to people, most notably in the form of analysis that takes for granted the eventual destruction of any fishery, as in the so-called "tragedy of the commons" (Hardin, 1968).

According to the "tragedy" model postulated by Hardin, where access to a fishery is free it is not in the interest of any single fishing unit to limit its own effort, as this will only enable others to take more. It is asserted that a further consequence of free access is intense competition among fishermen, over-intensified fishing effort and the eventual destruction of fish stocks. Thus, to prevent overfishing and depletion, it is argued by fisheries managers who subscribe to Hardin's model that limitations on fishing effort must be imposed by outside authority.

However, research carried out by anthropologists, biologists and geographers during the past fifteen years in different parts of the world has documented the widespread existence of local-level, common property-type systems of marine tenure which successfully regulate access to and use of resources, and so function as fisheries management systems (see, e.g., Ruddle and Akimichi, 1984; Cordell, 1989; Ruddle and Johannes, 1990; Johannes, 1978; Gray and Zann, 1989). From their basis in the complex social relationships of local society, fishermen themselves control access to and exploitation of local marine resources. Most types of marine tenure systems are of a traditional, unwritten kind, based on local customary law. A considerable variety of these complex marine tenure systems is found in the Pacific Islands. Some of the recent information on this is to be found in a collection of papers edited by Ruddle and Johannes (1990). Increasingly, the question

is asked whether such systems, which include unwritten regulations on access to fisheries areas and stocks, and the use of an imaginative range of technologies based on precise local knowledge of the behaviour of food species, are a practical basis for achieving sustainable utilisation of fisheries resources. The present case study addresses this through a detailed examination of marine tenure and development issues in Marovo, Solomon Islands (Figure 1).

Figure 1: The Western Pacific, showing location of Solomon Islands and Marovo (Map by University of Bergen/Copyright Edvard Hydiing 1991)

(Map not available in this version of the report)

## 3. Marine Tenure and Fisheries Management in the Pacific Islands

Complex and adaptive systems of customary marine tenure (or CMT, cf. Hviding, 1989)<sup>1</sup> are widespread in the Pacific Islands, where marine food resources are fundamental to subsistence. For the majority of Pacific island societies, indigenous forms of resource management cover areas of both land and sea (cf. e.g. Sahlins, 1958). There is growing awareness in the island region of the need to give close consideration to customary marine tenure systems when planning and implementing inshore fisheries development. This is the case, for example, in the independent Melanesian nations of Papua New Guinea, Solomon Islands, Vanuatu and Fiji, whose government policies make explicit provision for "tradition" and "custom" in matters of economic development. Even so, the prevailing mood of many fisheries officials is one of frustration. Charged with responsibility for increasing the rate of exploitation of fish stocks in the absence of good information on stocks and on the environment in which these are nurtured, their task may be made even more difficult by an inability to comprehend the nature and functioning of complex CMT systems.

In the Solomon Islands, some administrative support is given to customary rights in marine resources, even where this is not formally recognized in modern law (Baines, 1985). In a policy paper on resource development, the Western Province of Solomon Islands (of which Marovo is part) takes an explicitly supportive stand, in its stated aim to "recognize and respect customary fishing rights and knowledge and use these as foundations on which to build modern inshore fisheries" (Western Province, 1985). Implicit in such a policy statement is a need for closer examination of CMT systems, few of which have been documented in any detail anywhere in the Pacific islands region. Marovo is one of those few areas from which other Pacific island countries, and other parts of the world, stand to learn much (Hviding, 1988, 1989, 1990, 1991).

<sup>&</sup>lt;sup>1</sup> Where "customary" refers to a system that emerges from firmly traditional roots and has continuous and meaningful links with the past as it adapts to handling contemporary issues; "marine" refers to the system as dealing with coral reefs, lagoon, coast and open sea and including islands and islets contained in this overall seaspace; and "tenure" refers to a social process of interacting activities concerning control over territory and access to resources. The acronym "CMT" was first used by Hviding in a 1987 writing, subsequently published (Hviding, 1989).

### 4. Marovo Society

The Marovo Lagoon is essentially a large expanse of inshore sea, most of which is bounded by a raised barrier reef intersected by deep passages connecting the lagoon with the open sea, and skirting the coasts of three high volcanic islands (Figure 2). The area generally spoken of as "Marovo", also includes the "weather coasts" of Vangunu and Gatokae islands (so called because their shores are not protected by barrier reefs and so are subject to ocean swells), as well as the cliff-coasts of Viru Harbour in southeast New Georgia. Throughout this area a reasonably uniform system of territorial holdings and resource tenure operates. About 9,500 people live in Marovo (a 1991 estimate based on a 1986 official census figure of 7,824 [Solomon Islands Government 1989] and the assumption that the 1976-86 intercensal Marovo population growth rate of a very high 4.1 per cent is being maintained).

Figure 2: The Marovo area, showing settlement patterns as of 1986 (Map by University of Bergen/Copyright Edvard Hviding 1991)

(Map not available in this version of the report)

Although five languages, all closely related (Marovo, Vangunu, Bareke, Hoava and Kusaghe), are spoken in the area, Marovo language is the dominant one, understood and used by the four other language groups in interaction with the Marovo-speaking majority.

Named descent groups, called *butubutu*, each act as a corporate unit controlling a defined area of land and, in many cases, sea and reefs (Hviding, 1990).<sup>2</sup> Three church denominations are represented, their differing teachings providing a basis for some of the socio-cultural variation between villages. They are the Seventh Day Adventist (SDA) Church, the United Church (Methodist), and the Christian Fellowship Church (CFC). The CFC is an indigenous church fusing the Protestant beliefs of Methodism with traditional beliefs and communalism. Today, all Marovo villages are situated on the coast, and household-based subsistence is focused on shifting agriculture, fishing, and reef gleaning. All households also have varying levels of supplementary cash income from a diversity of sources such as wood-carving, commercial shells, copra, inter-

预览已结束,完整报告链接和二维码如下:

https://www.yunbaogao.cn/report/index/report?reportId=5 21705

