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An assessment of local perceptions towards natural resource management practices in the Tuvalu Islands, South Pacific

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Dedication

I firstly dedicate this thesis to Almighty God for giving me the strength to overcome the challenges of completing this thesis. I also dedicate this thesis in loving memories of my adopted parents, Soosoo and Finaunga and the people of Tuvalu. My special dedication goes to my husband Mr Ron Vaelei, my sons Jnr Vaelei Ron and Jnr Faletoa David Ron and baby daughter Hadassah Soosoo Ron.

I also dedicate this thesis to all my relatives in Tuvalu. To my relatives in New Zealand, Eseta & Leilua, Teuluaki & David, Peter McQuarrie, Igo & Paitilimoe, Losalini, Alee & Suia, Taumili & Moana. Thank you for your prayers.

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Aerial view of Fogafale, Funafuti the capital island of Tuvalu from a plane, a minute away from landing.

(Photo: Author, 2007).

Abstract

As the role of local people in natural resource management continues to be recognized in global conservation interventions, so too does the need to understand the perspectives of local people towards various resource management practices. This study examines local perceptions in Tuvalu towards traditional versus modern resource management practices, and furthermore assesses compliance and enforcement with protected areas village rules or legislation at the community level in the Tuvalu Islands, South Pacific. A mixed method research approach was adopted that includes a nationwide questionnaire survey, a review of the literature and triangulation. The study findings emphasize the dedicated support for local government to deal with most of the aspects of resource management in Tuvalu.

The survey findings showed a strong preference by participants to have their Island Councils or Kaupules as the appropriate and responsible authority to be the key informant on the stock status of their natural resources, to manage their island land and marine resources, and to report and impose penalties for violations against their village resource management rules. Participants also indicated a strong preference for a mix resource management system that combines both scientific-based and traditional resource management approaches over a system that uses only traditional resource management strategies.

Despite the weakness in the enforcement of existing resource management legislation in Tuvalu, where a monetary fine and imprisonment are the main prosecution methods, monetary fines was strongly perceived in this study as the most preferred method to promote village compliance and enforcement of both formal and informal village laws. In contrast, there was little support to use other common discipline methods such as imprisonment, public shaming, and traditional penalties such as public beating, and feeding of the whole island community by the caught violators; however, this is argued as either being morally wrong or no longer valid due to the Church's influence and the adoption of laws pertaining to human rights.

Although the findings of this study acknowledges that demographic and socio-economic factors can influence local perceptions towards resource management, there is generally very little evidence to conclude that there were significant differences in the perceptions of survey participants based on the many years they have resided in their home islands, having held a

leadership role and age. The minor differences in the perceptions may be associated with lack of diversity in the culture of each island, small national population, weak hierarchy in economic status at the individual level as seen in other developing nations.

This research provides a deeper understanding of the uncertainties associated with the need and obligation to impose stricter or more resource management measures in small local communities in response to the global move to protect biodiversity. Most importantly, it emphasizes the argument to consider the influence and engagement of local government as an opportunity to promote resource management interventions in Tuvalu and in other local communities of similar constitutional settings.

Preface

Much has been said on the need for effective resource management and conservation in local people's settings particularly in the Pacific Islands and around the globe. Yet little progress has been achieved. One of the main reasons for the slow progress points to the limited information that is available in the literature. As a Fisheries Research Officer within the Tuvalu Fisheries Department for almost a decade, the lack of proper research and documentation of local perceptions towards resource management creates a dilemma to whether the imposing of stricter management measures and legislation would improve village compliance and enforcement of resource management rules in Tuvalu. Such a dilemma needs urgent attention given the increasing number of 'conservation oriented' donor-funded projects that are coming in to the country with big budget and strict timelines.

The Government of Tuvalu, especially the main responsible agencies such as the Fisheries Department and Environment Departments in terms of human, financial and technical resource are nowhere ready to outpace the works that external donor-funded projects deliver as well as the absorptive capacity to foot the extra work load that these projects will hand over to the Island councils, and consequently the Government when these projects reach their timeframes. The recruitment and influx of foreign experts will likely to be continuous in the future who may provide demanding scientific recommendations to promote the pace of resource management interventions in Tuvalu. Their recommendations may be necessary, but may need more time for local communities and the government to familiarize with.

Addressing the discussed dilemma based on the need, challenges and the solutions to upscale resource management performances in Tuvalu through local perceptions is very important. The importance of this study is twofold whereby 1) the findings will assist interested resource managers with the formulation of specific future recommendations that are most appropriate for Tuvalu and 2) contributing to the existing literature on the role of local people in Natural Resource Management.

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Acronyms

CBCs	Community-based Conservation Concepts
CBD	Convention on Biological Diversity
CBNRM	Community-based natural resources management
CITES	Convention on International Trade in Endangered Species
DNA	Deoxy- ribose Nucleic Acid
EBM	Ecosystem-based management
FFA	Forum Fisheries Agency
GDP	Gross Domestic Product
GOT	Government of Tuvalu
ICDPs	Integrated conservation and development projects
IUCN	International Union for Conservation
MDG	Millenium Development Goal
MOU	Memorandum of Understanding
MSY	Maximum Sustainable Yield
NEMS	National Environment Management Strategy
NRM	Natural Resource Managment
PACPOL	Pacific Ocean Pollution Prevention Programme
PIR	Pacific Island Region
SPREP	South Pacific Regional Environment Program
SPSS	Statistical Package for the Social Science
QMS	Quota Management System

List of non-English words

Ahupu'a	A traditional land and sea tenure ownership and management <i>system</i> in Hawaii
Fale	House
Fale Kaupule	Traditional assembly of elderly men and village chief
Fale Kaupule Act	Local Government Act
Fenua	Land or Island community body that oversee the wellbeing of the island
Kaitiagakitaga	Maori word for a local guardianship system of land and marine resources
Kastom	A traditional land and sea tenure system in the Solomo Islands
Kaupule	Island council which serves as the executive arm for the Fale Kaupule
Pologa	Specialty of a clan
Te lii	An old traditional method of harvesting coconuts usually practiced in Niutao, Tuvalu
Tufuga	Master