

## **REQUEST FOR PROPOSALS**

### **TERMS OF REFERENCE**

#### **Project: Interdisciplinary Study of Market Forces and Fishery Management in Micronesia**

##### **Statement of Purpose:**

To undertake an interdisciplinary assessment and analysis of the market forces, both internal and external, that are driving the increasing demand for coastal fish resources within Micronesia; and to investigate the potential opportunities to reinforce community and traditional rights-based coastal fisheries management with contemporary rights-based and market-based fisheries management approaches that are increasingly being applied internationally to manage fisheries.

At a time when Micronesia's coastal fisheries are recognized by its leaders as being increasingly overharvested, there is also a weakening of traditional rights-based coastal fisheries management. This is occurring at a time when internationally there is mounting recognition of the potential of rights-based and market-based fisheries management approaches.

The study will:

- Identify, review and analyze the internal and external market forces and their impacts on coastal fisheries sustainability in Micronesia;
- Review the range of existing community and traditional rights-based marine resource management practices in Micronesia and assess them in terms of modern rights-based fisheries management approaches and the Ecosystem Approach to Fisheries management;
- Evaluate and propose possible approaches to incorporate modern rights-based fisheries management with community and traditional Micronesian fisheries management systems to reinforce local management of coastal fisheries, preferably within an ecosystem approach context;
- Identify appropriate and innovative sustainable financing options for coastal fisheries management within Micronesia, including market-based approaches and alternative livelihood options.

The study will contribute to the discussions around a shift in Micronesia's coastal fisheries policies to support and reinforce community and traditional rights-based fisheries management systems and the adoption of an ecosystem approach to fisheries management. The protection of vital coastal fisheries for communities and the development of innovative approaches to coastal fisheries management and financial sustainability are being undertaken within the context of the Micronesia Challenge. While the initial focus is on applying these approaches within Micronesia, they will also be more broadly relevant within the Pacific, including Hawaii.

##### **TNC Contact:**

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##### **Proposal Submission date:**

8 October 2010

**Context:**

Micronesia's diverse natural resources are the natural capital for local people. Recognizing the growing local and global threats to their natural resources and the Micronesian way of life, the leaders took action by launching the Micronesia Challenge<sup>1</sup>, an unprecedented commitment to protect the habitats and resources that sustain their people. The Micronesia Challenge jurisdictions are facing significant threats to the management of their coastal fisheries due, in part, to internal and external market forces placing increasing demands on the coastal fisheries resources at a time of weakening traditional resource management systems. All five jurisdictions have identified the overharvesting of reef fisheries as a priority threat that needs prompt attention, but in a manner appropriate to the existing governance systems, both traditional and legislative.

Micronesia offers a wide spectrum of fisheries governance, from strong traditional management practices that reinforce tenure and access rights, such as those in Yap State (FSM), to government-managed, open access fisheries like Guam that are driven primarily by market forces. As a result, the region provides the scope for innovative coastal fisheries management approaches—developing culturally appropriate fisheries management systems that build on the region's long traditions of sustainability while at the same time incorporating modern market-based responses.

The importance of coastal fisheries to the economies of Micronesia is reflected in the increasing attention they are receiving: from the value of fisheries to the national economies (see Gillett 2009), to the significance of local markets (see Rhodes *et al.* 2008; Houk 2010). Internationally there has been a shift to market-based and rights-based approaches to fisheries management to increase the ecological and economic performance of fisheries, while improving the sustainability of coastal communities (see Costello, *et al.* 2008; Essington 2010; Jacquet, *et al.* 2009). Similarly there has been recognition within the Pacific region, including Micronesia, of the need to adopt and implement an Ecosystem Approach to Fisheries (EAF) management (see Preston 2008 and 2009).

The purpose of this study is to undertake an interdisciplinary—fisheries, economics and social science—assessment and analysis of the internal and external market forces that are driving the increasing demand for coastal fish resources within Micronesia; and to investigate the potential opportunities to reinforce community and traditional rights-based coastal fisheries management with contemporary rights-based and market-based fisheries management approaches that are increasingly being applied internationally to more effectively manage fisheries. The long-term goal is to ensure sustainable coastal fisheries management practices that address the three contemporary challenges of overharvesting, escalating market forces, and a continuing shift away from the traditional management of fishing.

This project contributes to the ongoing work to implement EAF in support of the Micronesia Challenge goals. To ensure that improved fishing practices are sustainable in the long term, any changes in fisheries management must be implemented within existing government and traditional mechanisms. What is learnt in Micronesia can inform coastal fisheries work in other parts of the Pacific, including Hawaii.

**Scope of Work:**

**Scope:** The geographic scope of the study is the Micronesia Challenge jurisdictions: the Federated States of Micronesia, the Republic of the Marshall Islands, the Republic of Palau, the U.S. Territory of Guam and the U.S. Commonwealth of the Northern Mariana Islands.

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<sup>1</sup> The Micronesia Challenge is a commitment by the Chief Executives of the Federated States of Micronesia (FSM), the Republic of the Marshall Islands (RMI), the Republic of Palau, the U.S. Territory of Guam and the U.S. Commonwealth of the Northern Mariana Islands (CNMI) to *effectively conserve at least 30% of the near-shore marine resources and 20% of the terrestrial resources across Micronesia by 2020.*  
<http://micronesiachallenge.org>

The study will focus on coastal and nearshore fisheries (including catches of nearshore pelagic fish by coastal fisheries). To encourage consistency, it is suggested that the following categories, definitions and terminology used in Gillett (2009:4-6) be used, recognizing, however, that some fishing can be a mix of subsistence and commercial:

- *Coastal subsistence*: The catch that is retained for consumption by the fisher or given away to family or friends. For simplicity, catches from recreational fishing are also included.
- *Coastal commercial*: The catch that is sold and that comes from fishing operations in lagoons, reefs, deep slopes, and shallow seas. This category also includes fish caught by trolling and/or handlining from small vessels in the open sea adjacent to islands.
- *Fish*: is defined (as in the legislation of most Pacific island countries) to be aquatic living organisms and the term includes invertebrates and plants. To emphasize the narrower definition of fish, the term “finfish” should be used.
- *Fishing*: is considered as the harvesting of aquatic animals and plants, and includes aquaculture, unless otherwise stated.
- *Fisheries*: is considered to be an inclusive term and includes aquaculture and postharvest activities.

**Approach:** The study must employ an interdisciplinary approach. The specific expertise will be identified by the applicant and justified in the proposal. As a guide we would envisage expertise in the following fields would be needed: tropical coastal fisheries management; fisheries resource economics; knowledge of traditional fisheries management; and social sciences.

The study should use existing information as much as possible. The proposal must describe the level of involvement of Micronesian agencies and organizations.

There is a possibility of a Micronesia Challenge workshop on coastal fisheries management in the second half of 2010 or first half of 2011. This workshop would provide an opportunity to present the study and obtain information from the participants.

**Objectives & Tasks:** To undertake an interdisciplinary assessment and analysis of the internal and external market forces that are driving the increasing demand for coastal fish resources within Micronesia; and to investigate the potential opportunities to reinforce community and traditional rights-based coastal fisheries management with contemporary rights-based and market-based fisheries management approaches that are increasingly being applied internationally to manage fisheries.

The study will:

- Identify, review and analyze the internal and external market forces and their impacts on coastal fisheries sustainability in Micronesia;
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- Identify appropriate and innovative sustainable financing options for coastal fisheries management within Micronesia, including market-based approaches and alternative livelihood options.

The proposal submission must detail how the objectives and each of the tasks will be achieved.

***Deliverables:***

1. Progress Report 1
  - a. Summary of activities undertaken
  - b. Highlights
  - c. Issues
  - d. Planned activities
2. Progress Report 2
  - a. Summary of activities undertaken
  - b. Highlights
  - c. Issues
  - d. Planned activities
3. Draft Final Report
4. Final Report

The Final Report should include, *inter alia*:

- A non-technical Executive Summary.
- An introduction to the study including background, a literature review (including ‘grey literature’) and other pertinent information.
- Separate sections for each of the four bulleted tasks above, detailing the methods, results, discussion and recommendations. Where appropriate case studies and examples should be provided.
- Discussion and conclusions.
- Recommendations with explanations and justifications for:
  - Any suggested changes to coastal fisheries policies, legislative frameworks and management approaches across and within the five jurisdictions;
  - Implementing the study’s recommendations.
- Attachments:
  - People, agencies, organizations and groups consulted.
  - Implementation plan for the recommendations with milestones, success indicators, conceptual model and results chains ([http://fosonline.org/Site\\_Page.cfm?PageID=168](http://fosonline.org/Site_Page.cfm?PageID=168)) identifying specific and appropriate economic, ecological, governance and social/cultural indicators and measures. The study should suggest appropriate measures and indicators that can be incorporated into the Micronesia Challenge-wide measures program.
  - A two-page study overview brochure with the recommendations in a form that can be shared directly with communities.

***Proposed Timeline:***

8 October 2010 – Submission of proposals  
8 November 2010 – Notification of successful applicant  
15 November 2010 – Contracting completed  
28 January 2011 – Progress Report 1  
31 March 2011 – Progress Report 2  
20 May 2011 – Submission of draft final report  
3 June 2011 – Reviewers’ comments returned to consultants  
24 June 2011 – Submission of final report

**Proposal Submission:**

- Due 8 October 2010.
- Submit electronically to Dr. Andrew Smith, TNC: [andrew\\_smith@tnc.org](mailto:andrew_smith@tnc.org)
- Please note that while we have funding to undertake the study, it is not an excessive amount, so the evaluation of proposals will include a detailed assessment of the respective budgets.

- Proposal format (maximum 10 pages excluding Appendices):
  1. Summary
  2. Approach and methodology
  3. Study team
  4. Work plan and timeline
  5. Budget
    - a. Personnel
    - b. Contractual
    - c. Travel
    - d. Supplies & equipment
    - e. Other expenses
  6. Appendix: Past experience and references
  7. Appendix: Study team résumés

### References:

- Costello, C., S.D. Gaines and J. Lynham. 2008. Can catch shares prevent fisheries collapse? *Science* 321:1678-1681. <http://www.sciencemag.org/cgi/content/abstract/321/5896/1678>
- Essington, T.E. 2010. Ecological indicators display reduced variation in North American catch share fisheries. *Proc Natl Acad Sci USA* 107(2):754-759. <http://www.pnas.org/content/107/2/754>
- Gillett, Robert. 2009. Fisheries in the economies of the Pacific island countries and territories. Asian Development Bank: Mandaluyong City, Philippines. 483 pp. <http://www.adb.org/documents/studies/pacific-fisheries/default.asp>
- Houk, P. 2010. Market-based fish surveys: A wealth of information for Micronesia, but are we applying the knowledge? *Journal of Micronesian Fishing* 1(4): 10-13. <http://www.micronesianfishing.com/Journal.html>
- Jacquet, J., J. Hocesvar, S. Lai, P. Majluf, N. Pelletier, T. Pitcher, E. Sala, R. Sumaila and D. Pauly. 2009. Conserving wild fish in a sea of market-based efforts. *Oryx* 44(1):45-56. <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=6829468>
- Preston, G. 2008. The Ecosystem Approach to Coastal Fisheries and Aquaculture in Pacific Island Countries. Part 1: A Review of the Current Status. Part 2: Principles and Approaches for Strategic Implementation. Report to the Secretariat of the Pacific Community and The Nature Conservancy prepared by G. Preston (GPA). 2008. TNC Pacific Island Countries Report No 1/08. [http://www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Preston\\_2009\\_EcosystemApproachFisheries.pdf](http://www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Preston_2009_EcosystemApproachFisheries.pdf)
- Preston, G. 2009. The ecosystem approach to coastal fisheries and aquaculture in Pacific Island Countries and Territories. Secretariat of the Pacific Community and The Nature Conservancy. Noumea, New Caledonia. 20pp. [http://www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Preston\\_EAFM\\_Booklet.pdf](http://www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Preston_EAFM_Booklet.pdf)
- Rhodes, K.L., M.H. Tupper and C.B. Wichilmel. 2008. Characterization and management of the commercial sector of the Pohnpei coral reef fishery, Micronesia. *Coral Reefs* 27:443-454 <http://www.springerlink.com/content/n288816723k22386>