

NOTICE OF PUBLICATION



AQUAFISH COLLABORATIVE RESEARCH SUPPORT PROGRAM

RESEARCH REPORTS

Sustainable Aquaculture for a Secure Future

Title: **Small Scale Fisheries Management: Lessons from Cockle Harvesters in Nicaragua and Tanzania**

Authors: Brian Crawford, ¹ Maria D. Herrera, ¹ Nelvia Hernandez, ² Carlos Rivas Leclair, ² Narriman Jiddawi, ³ Semba Masumbuko, ³ and Maria Haws⁴

¹Coastal Resources Center, university of Rhode Island, Narragansett, Rhode Island, USA

²Centro de Investigación de Ecosistemas Acuáticos, Universidad Centroamericana, Managua, Nicaragua

³Institute of Marine Sciences, University of Dar es Salaam, Dar es Salaam, Tanzania

⁴Pearl Research and Training Program, Pacific Aquaculture and Coastal Resources Center, University of Hawaii at Hilo, Hilo, Hawaii, USA

Date: **May 1, 2012**

Publication Number: CRSP Research Report 10-A01

The CRSP will not be distributing this publication. Copies may be obtained by writing to the authors.

Abstract: The role of women in gleaning fisheries tends to be underestimated and poorly documented although they play an important role in coastal food security and income generation. This article describes two initiatives for co-management of women dominated cockle (*Anadara* spp.) fisheries implemented in Zanzibar Island of Tanzania and in Nicaragua that were based on a Fiji model. In each case, significant progress was made at the pilot scale but required adaptation to the community and national context. The Nicaragua case resulted in increasing densities of cockles inside and outside small scale no-take zones in a small estuary after a two-year period of implementation. In Zanzibar, out of several no-take sites established on reef flats, only one showed similar results. Other sites' poor performance is likely due to poor site selection, small size, and non-compliance. Varying degrees of poaching affected both locations and continues to be an issue. In Zanzibar, local and national government played highly supporting roles whereas in Nicaragua, local government was supportive but national government continues to exhibit top-down decision-making, while still evaluating the alternative co-management approach. In both cases, university extension initiatives were influential in building community capacity for management and playing an advocacy role with national government. Both locations are poised for scaling up to more geographic sites as well as fostering policy change that can lead to more integrated and ecosystem-scale approaches to sustainable fisheries management.

This abstract was excerpted from the original paper, which was published in *Coastal Management* (2010) 38: 195-215

CRSP RESEARCH REPORTS are published as occasional papers by the Management Entity, AquaFish Collaborative Research Support Program, Oregon State University, 418 Snell Hall, Corvallis, Oregon 97331-1643 USA. The AquaFish CRSP is supported by the US Agency for International Development under CRSP Grant No. EPP-A-00-06-00012-00. See the website at <aquafishcrsp.oregonstate.edu>.