

# Collaborating with Communities in Coastal Management in Cebu, Philippines

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# Outline

*Purpose: Provide a case-study of involving public voices through collaborative conservation research and action in Philippine coastal management*

- Context and Geography
- Center for Collaborative Conservation (CCC)
- Stakeholder Support for Fishery Policies
- Experiential programs for educators and coastal policy communication
- Implications and future endeavors



# Philippines Geography



# Context

- Over 7,107 islands
- No-take MPAs are less than 5% of municipal waters
- Focus on the municipality of Santander, Oslob, and Samboan

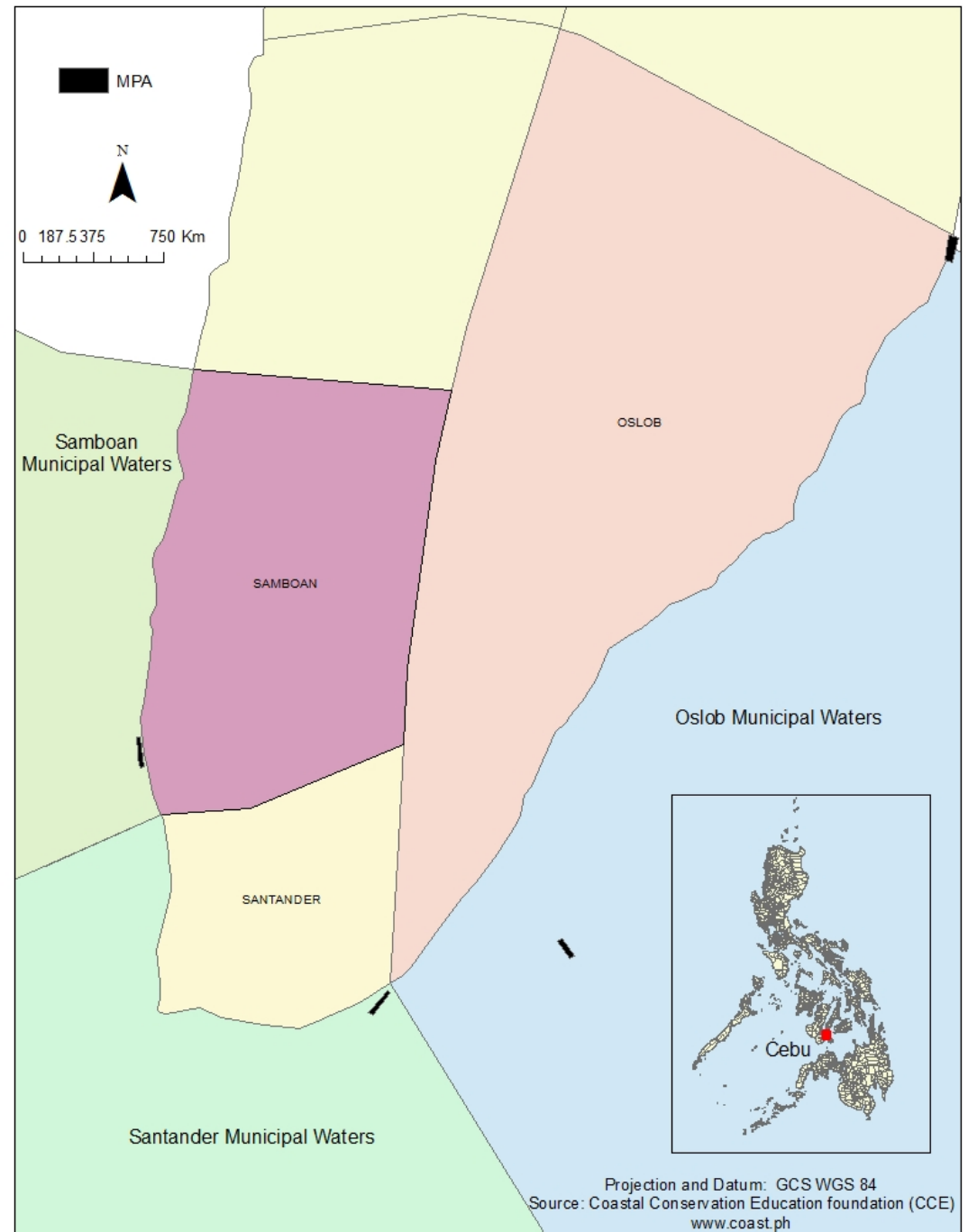




Photo Credit: Arren Allegetti

- contain the greatest number of fish species within the world's most marine diverse area, the Indo-Malay Philippines archipelago (Carpenter & Springer, 2004).

# ISSUES

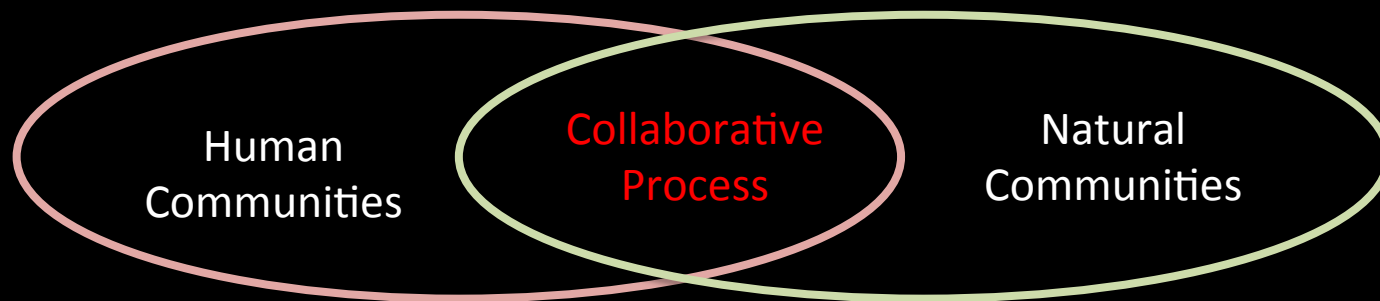


# What management strategy addresses these issues?

## **Coastal Resource Management (CRM) applying the Ecosystem Based Management framework (EBM):**

An approach that considers the entire ecosystem, including humans. The goals of EBM is to maintain an ecosystem in a healthy, productive, and resilient condition so that it can provide the services humans want and need (Macleod et al., 2005)

# The Center for Collaborative Conservation (CCC)



- Focus: connect, learn, engage, share, act
- CCC Fellows
- Funding

***ACCEPTABILITY, CONFLICT, AND SUPPORT FOR  
COASTAL MANAGEMENT POLICIES IN CEBU,  
PHILIPPINES***

- Master's Thesis:
- CCC Products
  - Series of workshops with local governments discussing thesis results and accountability issues
  - Management reports and academic publications
  - RELATIONSHIPS!

# *I. NORMS, CONFLICT, AND ACCEPTABILITY OF COASTAL RESOURCE MANAGEMENT POLICIES*

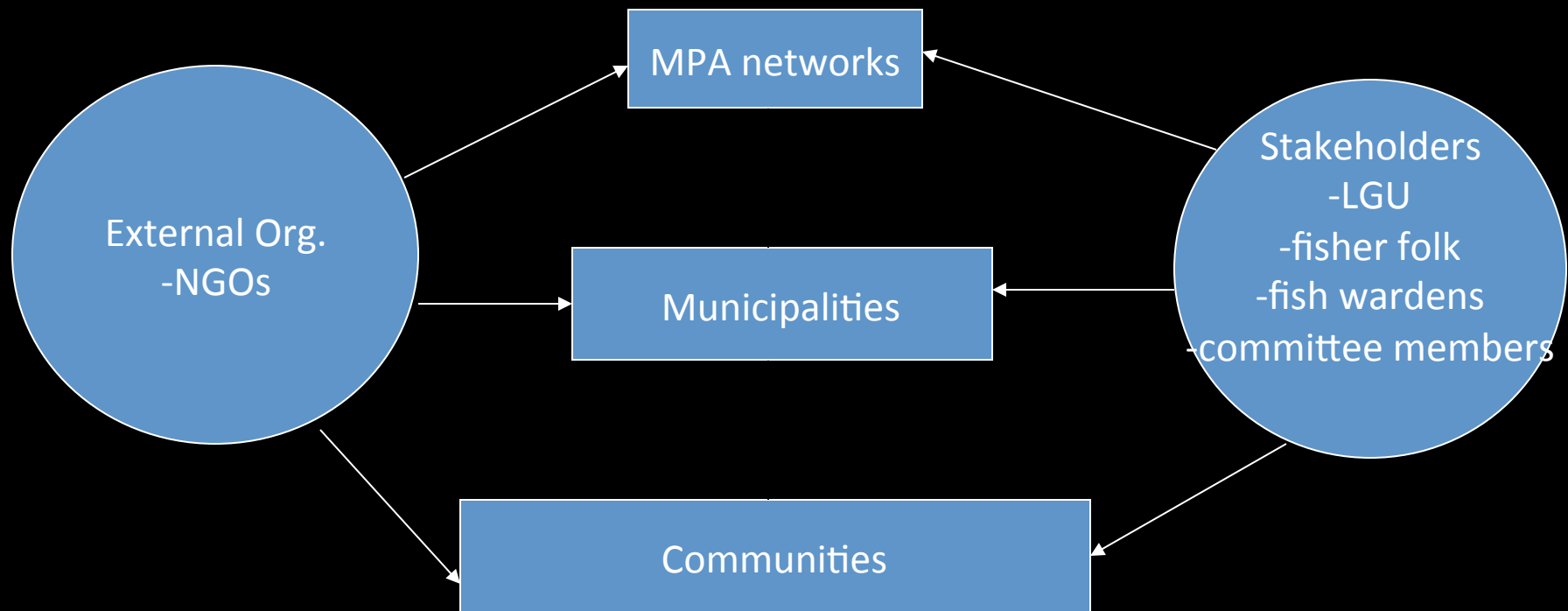


Allegretti, A. M. (2012). *Stakeholder Support for Coastal Management in Cebu, Philippines: Acceptability, Conflict, and Support for Coastal Resource Management Policies in Cebu, Philippines*. Lambert Academic Publishing

An underwater photograph showing several divers in a blue ocean. A large, light-colored net is visible, partially submerged and held by the divers. The water is clear, and the scene is lit from above, creating a bright, slightly hazy atmosphere. The divers are wearing dark wetsuits and fins. The net appears to be made of a fine mesh material.

## II. DIVING UNDER THE SURFACE: INVESTIGATING INSTITUTIONAL ACCOUNTABILITY AND CONFLICT IN COASTAL RESOURCE MANAGEMENT

# RESEARCH SAMPLING SCALES



# MIXED METHODS

## *Data Collection*

- Onsite surveys ( $n = 511$  )
- 23 semi-structured interviews with key informants
- Obtained five-year CRM plan, and public records on coastal policy

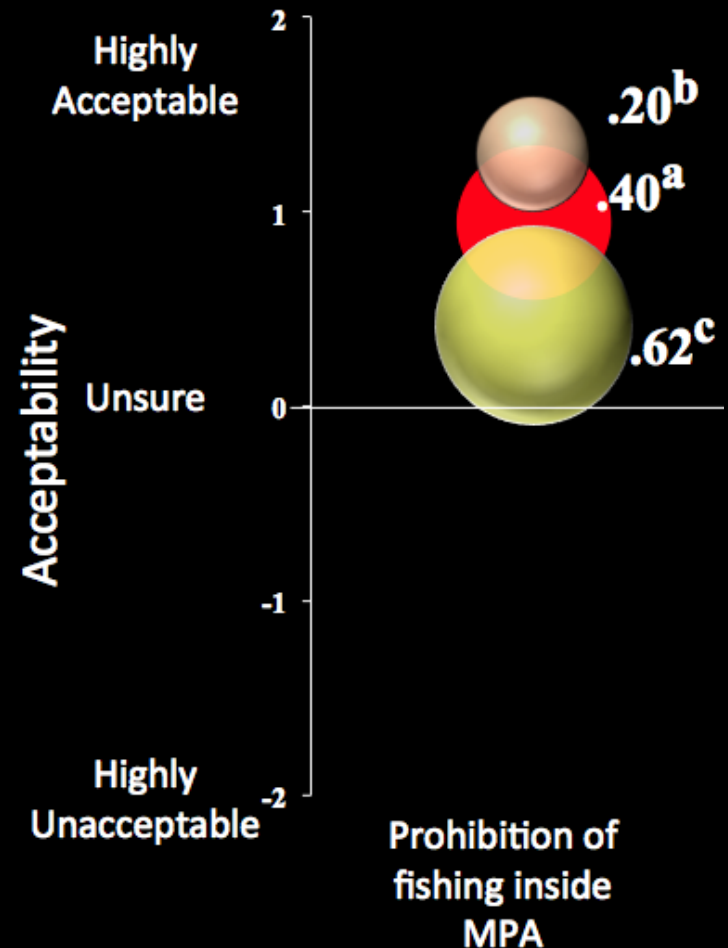
## *Analyses*

- Potential for Conflict Index ( $PCI_2$ )
- Interpretive Phenomenological Analysis (IPA)
- Situation/Conflict Mapping



# RESULTS DISSEMINATION AND CONVERSATION

- *Municipality differences* in acceptance and enforcement of policies
- *Less acceptance and consensus* for outside MPA policies
- PCI<sub>2</sub> is a tool for policy makers to discuss *conflict, consensus, and public support* for CRM policies



# ***RESULTS DISSEMINATION AND CONVERSATION***

- Institutional accountability for CRM initiatives was the crux of the conflict occurring in the municipality
- Fish wardens will perform CRM duties with limited power and resources
- Municipal institutional conflicts have effects on the communication, legitimacy, enforcement, and trust for CRM policies at the community level
- The MPA Network can serve as a portal for conflict management



# Further questions...

- How can could I continue this work?
- Relationship with communities and local governments needed to sustained
- The conversation on coastal management and what matters to different stakeholders needed to continue...



*From research to action:*  
Experiential programs for educators and coastal  
policy communication

**Purpose**

- To support *coastal policy communication efforts* and enhance *collaboration* between
  - policy makers
  - fish wardens
  - educatorsthrough *experiential learning trips to Marine Protected Areas*

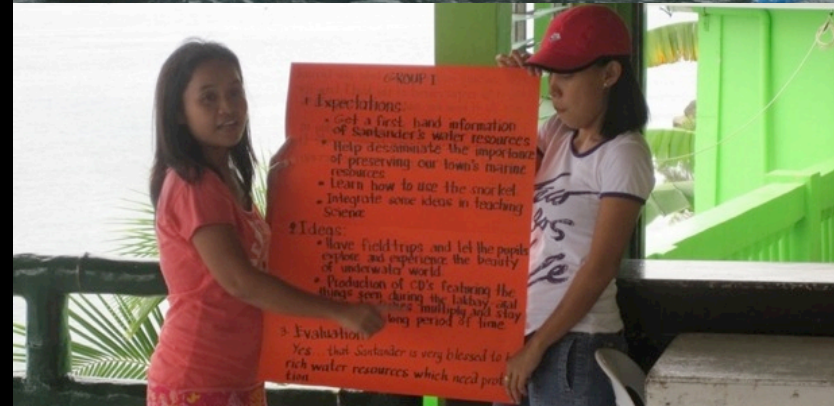


# Trips at a glance

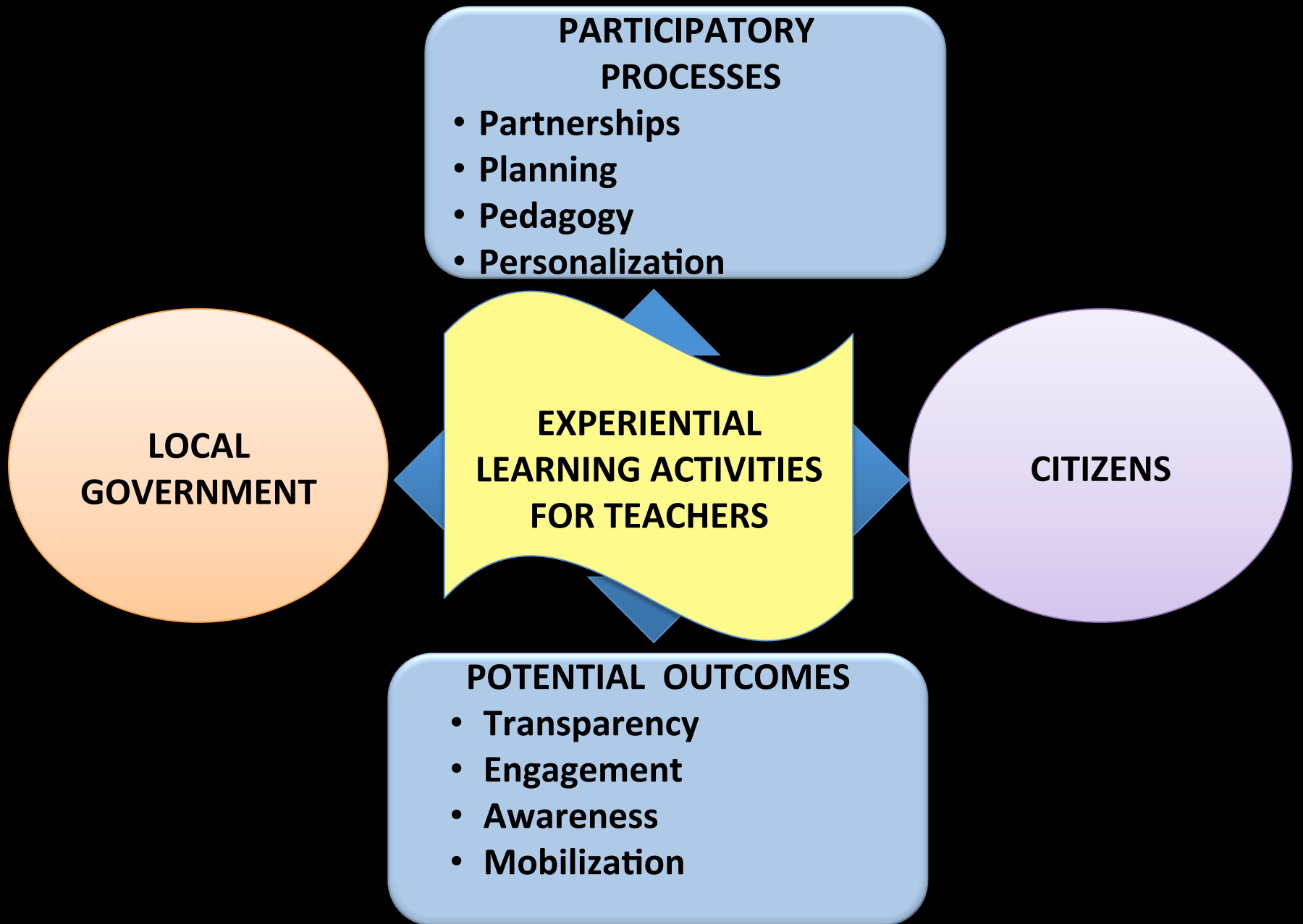
- >30 elementary school teachers and principals
- 10 fish wardens
- 3 government representatives
- Workshop topics included:
  - Santander's ICRMP
  - National/municipal laws
  - Santander's second MPA
  - Tourism revenues (30-40,000 USD)
  - Fish warden roles
  - Food security and livelihoods concerns

# Outcomes

- Collectively developed
  - awareness of local issues
  - trust
  - capacity-building
- Focus on collaboration and relationship-building, not data collection



*"We've never been part of these discussions before"*  
-Elementary teacher



*Emergent framework for increasing educator involvement in coastal governance through experiential learning programs*

# Implications/Future Endeavors

- General consensus – coastal policy communication and government-citizen partnerships could be enhanced through experiential learning activities for educators
- Information, Education, and Communication Campaigns – involve educators?
- “This is just a beginning”

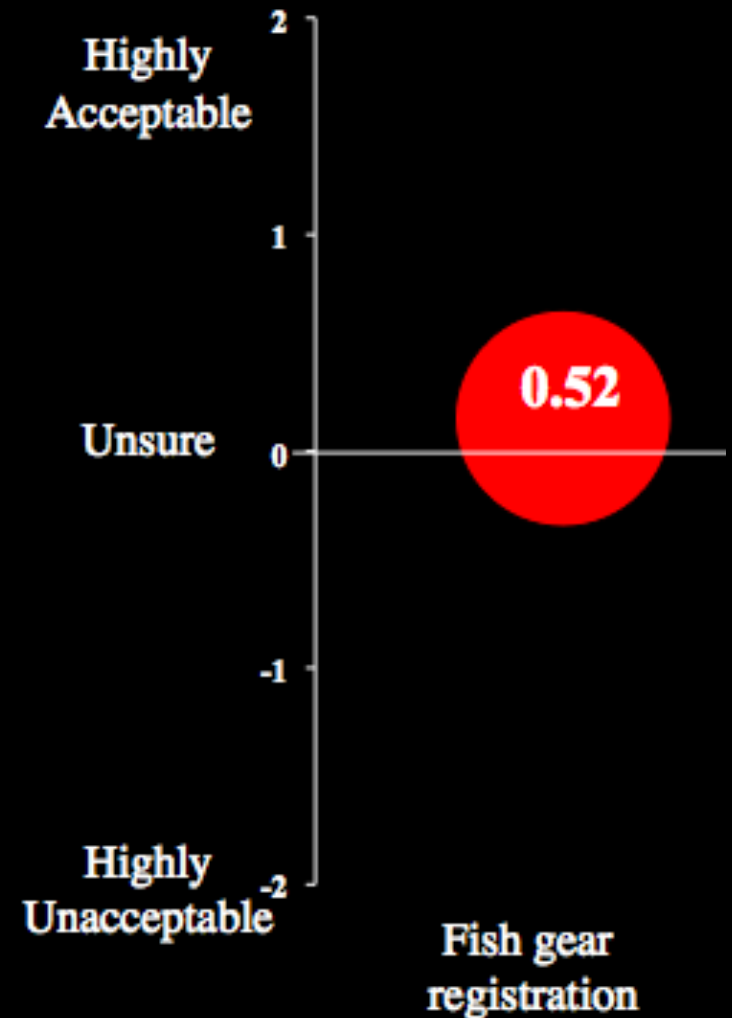
# Questions?



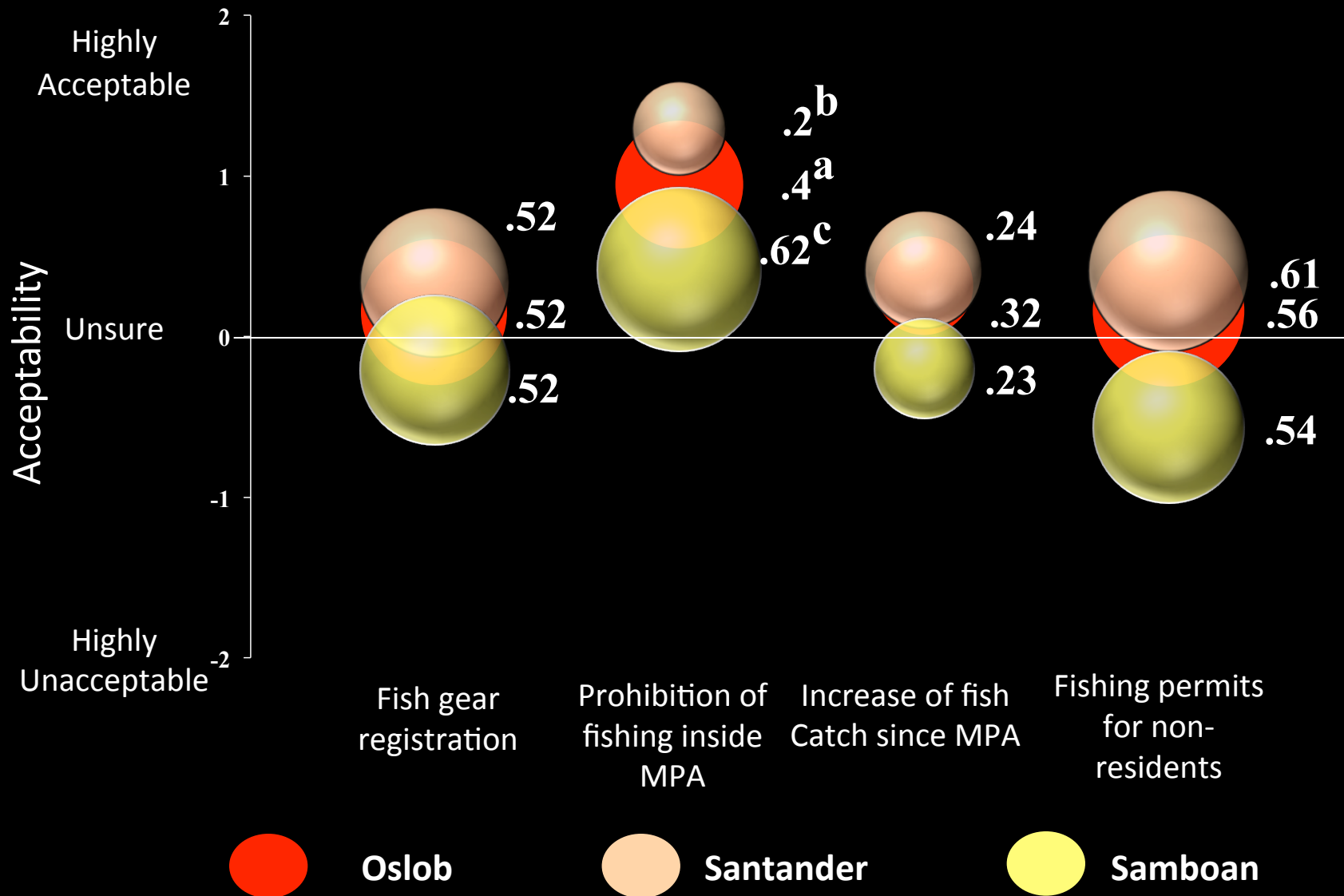
*Special Thanks to Nonong Burreros...*

# RESULTS DISSEMINATION AND CONVERSATION

- Fishers approved MPAs
- *Less acceptance and consensus* for outside MPA policies
- PCI<sub>2</sub> is a tool for policy makers to engage and discuss *conflict, consensus, and public support* for CRM policies
- Presented PCI<sub>2</sub> in NGO reports, legislative sessions, and MPA Network council meetings



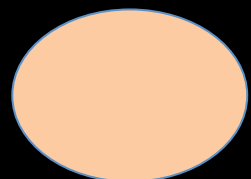
# Acceptability of CRM policies and scenarios



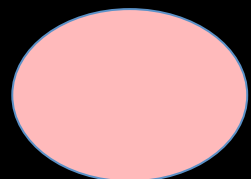
\*  $PCI_2$  values with different superscripts are significantly different at the  $p < .05$  level

KEY

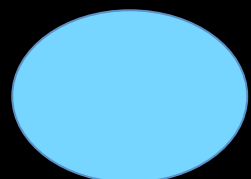
*Color Scheme for Stakeholder groups:*



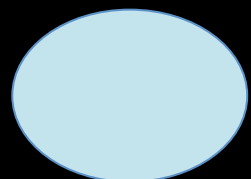
Local Government Unit (LGU)



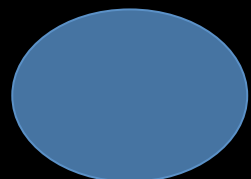
Fish Warden Association



Community Residents



NGO



MPA Network

Absence of community FARMC (Fisheries Aquatic Management Council)



Issues (Coastal Law Enforcement and Coastal Resource Management)

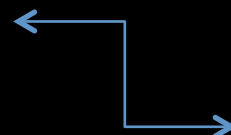
*Relationship scheme:*



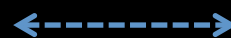
Tension or criticism toward person



Strong working relationship



relationship



Weak relationship



Affiliation through same organization or group

