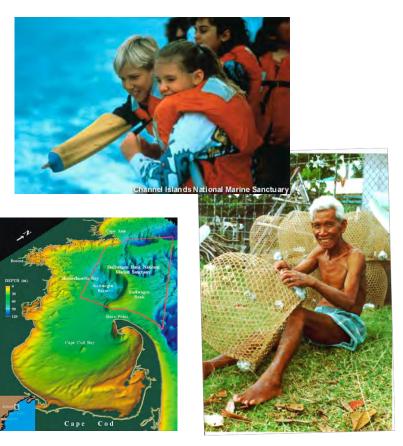
# People Matter: Social Impacts of Marine Protected Areas











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### **Outline**

- Introduction
- Social impacts of MPAs
- Social factors for MPA success
- Research frontiers
- Conclusion

### **Outline**

Introduction:

(1) MPAs as social institutions

(2) Understanding coastal communities

### By definition, MPAs are:

1. Designed to change human behavior and provide new incentive structures.

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- 2. Limited by surrounding socioeconomics and social constraints.

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- 1. Designed to change human behavior and provide new incentive structures.
- 2. Limited by surrounding socioeconomics and social constraints.
- 3. Implemented with social interests in mind.
- 4. Dependent on the human dimension to be successful; biological performance is linked to people's behavior change.

As a result:

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1. Increasing scrutiny regarding the social impacts of MPAs on people/communities.

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- 1. Increasing scrutiny regarding the social impacts of MPAs on people/communities.
- 2. Increased policy discussion focused on the human dimension; balancing social and biological "tradeoffs'.
- 3. Increased social science research designed to assess and quantify effects of MPA designation and management.

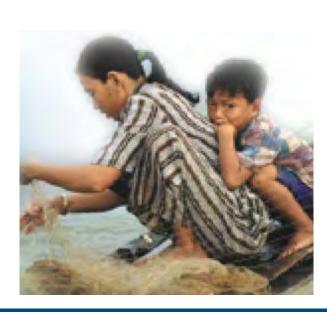
### **Objectives of MPAs often reflect:**

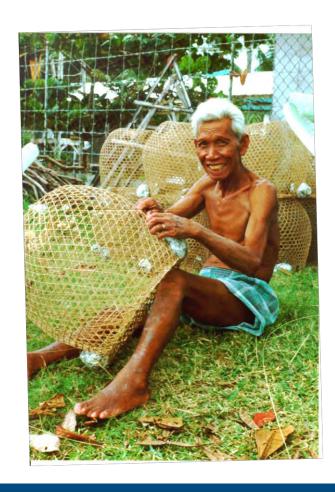
- Sociocultural context
- Socioeconomic setting
- Governance needs
- Political realities
- Human ecology



### Social contributions to MPA management:

- Assessment
- Needs identification
- Public feedback
- Prediction of social impacts
- Mitigation of social impacts
- User acceptance







### MPA design should seek to understand:

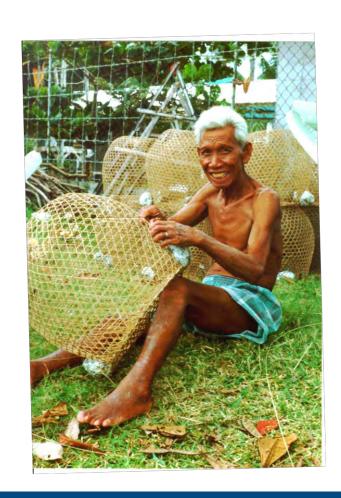
 Diversity of coastal people and livelihoods



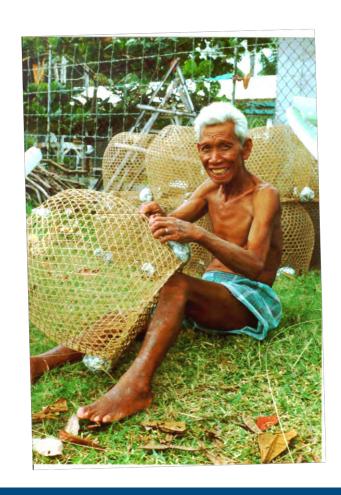
- Diversity of coastal people and livelihoods
- HH adaptation to reduce social risks



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- Incentives that drive user decision-making



- Diversity of coastal people and livelihoods
- HH adaptation to reduce social risks
- Incentives that drive user decision-making
- Sources of vulnerability to stresses/shocks



### Fishers often oppose MPAs because of:

Use restrictions

- Use restrictions
- Limitations on income and livelihood

- Use restrictions
- Limitations on income generation
- Lower satisfaction with alternative livelihood options than fishing

- Use restrictions
- Limitations on income generation
- Lower satisfaction with alternative livelihood options than fishing
- Reallocation of resources and wealth among social groups

### **Outline**

- Introduction
- Social impacts of MPAs
  - Serve as a resource reallocative mechanism
  - Benefits are diffuse while costs are concentrated

### **Outline**

- Introduction
- Social impacts of MPAs

(1) social benefits

(2) social costs

# Social Benefits of MPAs

- Increased catch (spill over)
- Increased revenue
- Improved diet/health
- Increased non-consumptive uses
- Improved/diversified local economies
- Enhanced existence value
- Strengthened option value
- Enhanced resilience ("insurance policy")

### Social Costs of MPAs

- Catch and revenue declines (short term?)
- New management costs
- Opportunity costs
- Direct operating costs
- Social and political capital costs
- Increased and/or new risks
- Increased human migration; displacement
- Local demographic and economic changes

#### Potential issues include:

- Loss of customary access to traditional fishing grounds; impeded cultural practice
- Preferential access arrangements
- Distribution shifts in income, food security, material assets
- No or poor availability of alternative or supplementary livelihood opportunities

### Potential issues include (cont'd):

- Higher user congestion within open areas
- Increased fishing effort outside of MPA
- Increased travel costs/time to open areas
- Increased user conflicts in open areas
- Distributive equity changes; increased disparity
- Increased occupational risks

#### Non-extractive use benefits:

- Diversification of local economy
- Increased visitor revenues as an offset to lost fishing revenues
- Increased local tax revenues
- Reduction in conflicts between extractive and non-extractive uses
- Allocation for access and use by nonextractive users

#### Non-extractive use costs:

- Negative visitor industry impacts on the natural environment
- Possible negative economic impacts from shift out of extractive into non-extractive
- Loss of traditional way of life
- Sustainable rates of non-extractive uses require time and study to establish

# **Shifts in Economic Equity**

- Poorly understood
- Less studied than effects on efficiency
- Distributive economic effects vary by subgroup
- Transfer of direct use benefits from consumptive to nonconsumptive uses



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#### Social Factors for MPA Success

#### **Critical factors include:**

- Public participation and input (ownership)
- Mechanisms for conflict resolution
- Clear and socially-compatible objectives
- Reflection of local socioeconomic realities
- Management accountability ensured
- Stakeholder capacity building and training

#### **Social Factors for MPA Success**

### Critical factors include (cont'd):

- Incentive structures for local participation, including economic benefits
- Benefits outweigh costs (real & perceived)
- Benefits and costs shared equitably
- Provision of livelihood opportunities

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#### **Research Frontiers**

- Limited social knowledge compared to ecological
- Know more about economic impacts than social impacts
- More qualitative than quantitative analysis
- Limited long term analysis
- Experimental design (with and w/o)
- Baseline data and monitoring

#### **Research Frontiers**

- Impacts on poverty
- Distributive impacts among stakeholders
- Social outcome tradeoff analysis
- Relationship to social trend rates
- Social impact variability
- Comparative social impact analysis across MPAs
- Investigate variables that influence social impacts

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#### Conclusion

- Social rationale for MPAs varies
- Social and biological uniqueness of MPAs
- Balancing act between needs and realities
- No blueprint for MPA social success
- MPAs cannot exist in isolation from social
  - factors and issues
- People matter

### **Thank You**

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