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
MPAs as social institutions

By definition, MPAs are:
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1. Designed to change human behavior and provide new incentive structures.
MPAs as social institutions

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2. Limited by surrounding socioeconomics and social constraints.
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2. Limited by surrounding socioeconomics and social constraints.
3. Implemented with social interests in mind.
MPAs as social institutions

By definition, MPAs are:

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:
MPAs as social institutions

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1. Increasing scrutiny regarding the social impacts of MPAs on people/communities.
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2. Increased policy discussion focused on the human dimension; balancing social and biological „tradeoffs”.
MPAs as social institutions

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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
MPAs as social institutions

Social contributions to MPA management:

- Assessment
- Needs identification
- Public feedback
- Prediction of social impacts
- Mitigation of social impacts
- User acceptance
Understanding coastal communities
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MPA design should seek to understand:
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- **Diversity** of coastal people and livelihoods
- **HH adaptation** to reduce social risks
- **Incentives** that drive user decision-making
Understanding coastal communities

MPA design should seek to understand:

- **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:
Perceptions and attitudes

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- Limitations on income and livelihood
Perceptions and attitudes

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- Limitations on income generation
- Lower satisfaction with alternative livelihood options than fishing
Perceptions and attitudes

Fishers often oppose MPAs because of:

- 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
Shifts in Access and Use
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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
Shifts in Access and Use

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 non-extractive users
Shifts in Access and Use

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 non-consumptive uses
Outline

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- Social factors for MPA success
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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