Distributed governance of marine ecosystems -- Ideas from Hawaii

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Ecosystem approaches to natural resource conservation and management require an increased focus on...

...human beings and society in their environments
Governance

- Mediating the relationship between people and nature
  - Fisheries management is a highly complex system meshing natural systems and social problems that too frequently lead to inefficiency on multiple dimensions
Types of Resource Regimes

- Open Access
- Common Property
- Private Ownership
- State (government) Assets

 Relate these resource regimes to Governance Options
Standard political approaches

- Laissez fair (open access)
- Community or cooperative co-management
- Government Regulation
  - Seasons, quotas, capacity limits
- Rights-based (Privatization)
  - Individual transferable quotas; corporatism
- State (government) ownership & operations
- Or Shared authority (distributed governance)
Advantages of Participation

Increase involvement of fishing industry and communities in decision-making and administration of the regulatory regime

Fishery management council meeting in Pago
Pago, American Samoa
Levels of governance

- External relationships between government, industry and communities
- Internal relationships within industry and communities

Each has a different information content
Leveraging Capacities

Participants (governments, fisheries, communities) bring different skills, capabilities, interests & incentives to management problems
Industry Capacities

Extensive information on

- Resource spatial and seasonal distribution
- Harvest technologies
- Operational methodologies
- Fishery alliances and rivalries

→ Advantages in designing & implementing rules

Hawaii’s longline fishery information sharing networks, adapted from Barnes-Mauthe et al. 2013,
Government Interests

- Extend beyond immediate local concerns
  - Ecological dimensions
  - Shared stocks with other jurisdictions or other fisheries
- Ability to enforce when local options fail
  - No guarantee that local interests will be effective governance

The Pacific Islands Region

- CNMI
- Hawaii
- Palmyra & Kingman
- Guam
- Wake
- Johnston
- Baker & Howland
- Jarvis
- American Samoa
Nature of Distributed (Shared) Governance

Over-arching agreement on …

– Scope of authority
  • Clearly defined rights & responsibilities at each level
– Internalization of costs at appropriate scale for each
• Setting the stage for self-organization at the local level
  • Devolving costs and control from central government

→Within a formal (or informal) agreement between government and industry/community
Research Question

What is different for ecosystem research in an economic and social science research context?
Suggested Answers

• Not different: Economic and social research already exists within an ecosystem context and can contribute where appropriate

• Different: Economic and social processes have profound short-term and long-term effects that make the independence of natural systems unlikely
  – Ecosystem-based management involves a broader range of participants, stakeholders, and jurisdictions [across a broader scale] and this requires the integration of ecosystem process understanding into socio-economic process.
Expectation of Social Involvement in Ecosystem Management

Cultural diversity and indigenous links to "place" mean that community approaches to many ecosystem approaches to fisheries management issues are critical & expected.
Mahalo

Pagan Island, Northern Mariana Islands, 1984