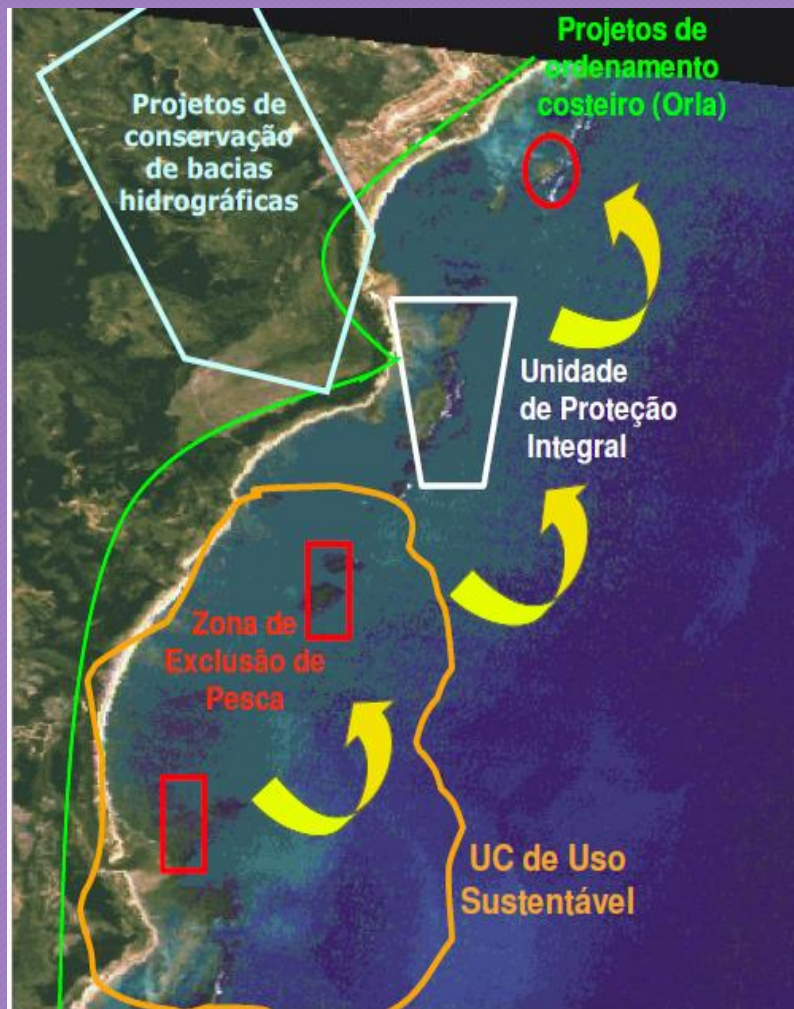


Payment for Coastal and Marine Environmental Services

Peter May – CPDA/UFRRJ

Valéria Vinha – IE/UFRRJ



Source: FUNBIO

Environmental services from the sea

- Coastal water quality
- Stabilization of coastlines
- Dune stabilization
- Dispersion and dilution of pollutants
- Mitigation of climate change effects
- Carbon fixation in mangroves and in the sea itself
- Nurseries, recruitment and maintenance of fish stocks
- Scenic beauty and environmental integrity / biodiversity for visitation

“Emergent markets” for coastal and marine environmental services

- “Blue carbon” credits for the voluntary carbon market
- Water quality markets including coastal areas
- Certification of fishing quotas, establishing fishing exclusion areas, *defeso*, etc.
- Species Conservation Banks
- PES schemes with the tourist trade (ex: Belize coral reef users’ fees)
- “Premium” insurance and credit rates for sustainable development – ex. Cleaner building codes, etc.
- Direct payments to fishers/communities (rights holders) for habitat protection



Source: FUNBIO

Brazilian national context for coastal and marine PES

1. Low social perception of service provision

- Low and poorly qualified demand
- “Blind point” in public policies

2. Socioeconomic impact on coastal management

- Need to specify and locate services, who provides them and who demands them

Mangroves and shrimp cultivation – RN

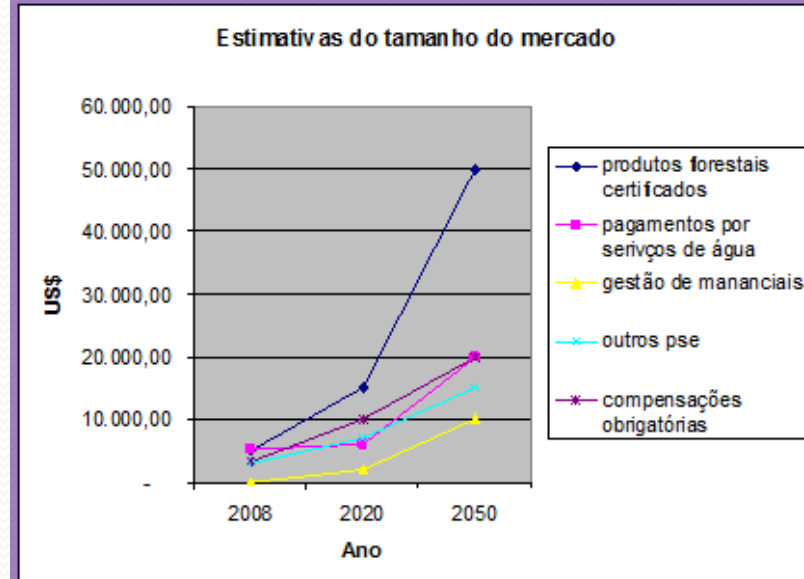
Dune stabilization – CE

Island tourism (Noronha, Ilha do Mel, Ilha Grande, Ilha Bela)

Fishing exclusion areas – APA de Tamandaré a Paripueira – PE/AL

Mangrove carbon sequestration – MA

3. Appropriate mechanisms to support PES schemes



- In 2008/2009 the global market for “ecological” fish products increased more than 50% to a retail value of US\$1,5 billion.

Source: FUNBIO



Scheme for Payment for Coastal and Marine Environmental Services – Arraial do Cabo Case

Fishing in 1960 – Arraial do Cabo



Fishing in 2008 – Arraial do Cabo



The RESEX-Mar of Arraial do Cabo



The Case for Coastal/Marine PES in Arraial do Cabo

Concept: integrated coastal/marine resource management with PSA

Coverage: Upwelling area in multiple use coastal/marine zone

- port, fishery, tourism, offshore oil rig support infrastructure

Diagnosis:

- a) Protected areas (Resex-Mar, APAs) instruments for territorial management and preservation
- b) Need to implement a plan for utilization and management
- c) Control over predatory fishing
- d) Absence of economic instruments that value the origin and quality of seafood and tourism products of sustainable origin;
- e) Fragility of public administration and financing
- f) Insufficient compensation by enterprises that benefit from coastal/marine resource base

Proposed PES – Resex-Mar

- ❑ **Proposal:** reduce conflicts among economic interests and socio-environmental vulnerability through consolidation of economic instruments and institutional strengthening
- ❑ **Service Providers:** Colônia de Pesca, Associations of fishers and diving enterprises, Fundação Instituto Pesca-FIPAC, Resex Association + ICMBio (co-managers of the Resex)
- ❑ **Services furnished:** restricted access to fishery stocks, protect scenic beauty and archeological patrimony, maintain the integrity of coastal rock formations and beaches, with effective control over conflicting economic activities in accordance with the Resex management plan

Who pays, how and for what?

Demanders / payers:

- Tourists
- Divers
- Commercial fishermen
- Port
- Oil companies

Instruments:

Existent:

- “defeso”
- Ecological Value-Added Tax
- port fees
- marina entry fees

To create:

- PES (user-specific charges)
- Certified fish products / market niches
- Inter-institutional fund for coastal/marine management
- Monitoring, verification plan

Governance system

Pool of institutions

- To implement PES requires building linkages between many partners, whether they be individuals or institutions
- Setting up a workable PES scheme may involve 10-15 partners from all segments at different levels
- Each partner involved would need to establish regular interaction with leaders and organizations of the local community, providing a range of services and support functions, such as fund raising, institution building, business networking, innovation transfer, technical training, legal support, and so on
- High transactions costs – require startup financing...

Thank you!

- peter@ecoeco.org
- valeriavinha@globo.com