

Balancing Carrots and Sticks for Fisheries Management: The case of hilsa management in Bangladesh

Challenging new frontiers in the global seafood sector –
a Northern Enlightenment

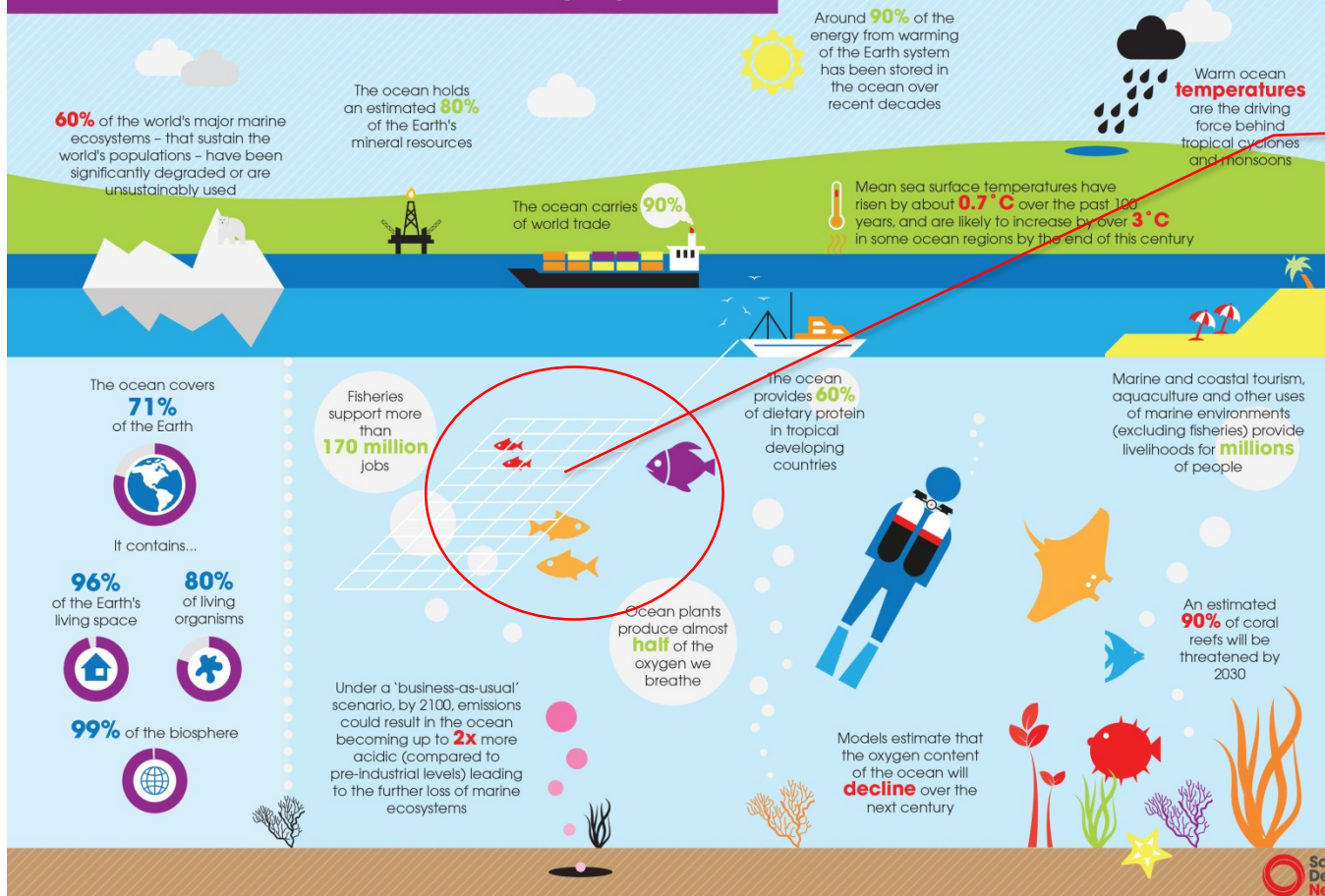
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Benefits and threats to marine and coastal ecosystems

Oceans: Benefits and threats to living organisms



- Major source of food: the main or only source of animal protein in some poor communities
- Some 45 million directly employed
- Up to 200 mill indirectly
- The most traded food commodity

Fisheries in crisis



The majority of commercially important fish species are under stress

Fisheries management regimes

Allowable catches

Limited licensing

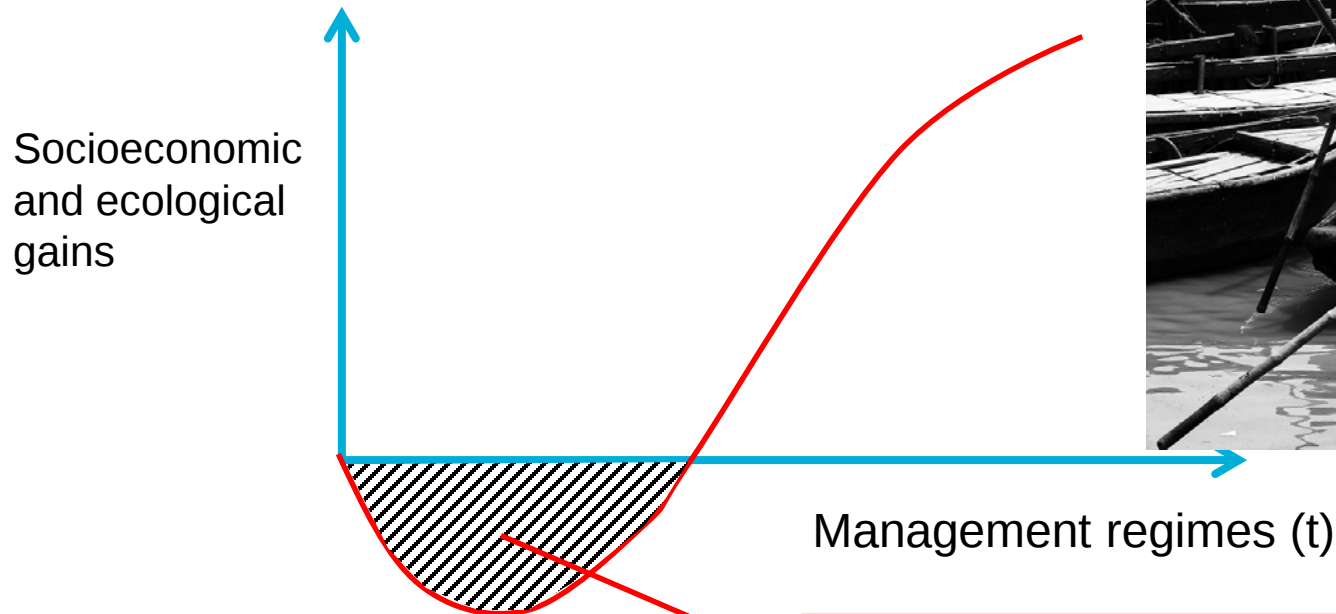
Fishing gear restriction

Off season

No take zones

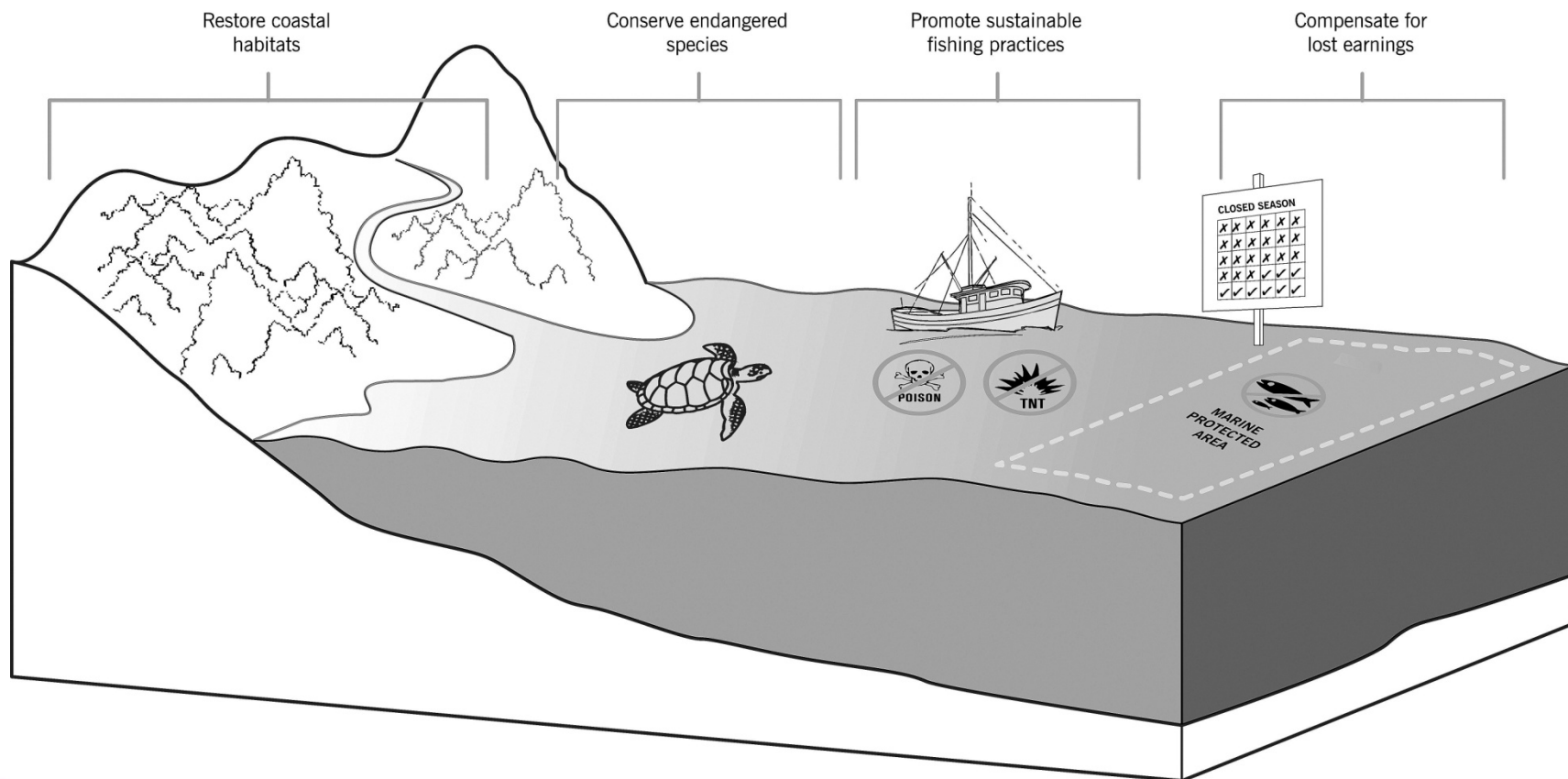


Short-term economic loss



How to overcome this short-term economic loss??

Ways that economic incentives can be added to existing regulatory schemes



Case study: *Payments for Hilsa conservation in Bangladesh*

- Anadromous fish
- Bangladesh accounts for about 60% of total hilsa catch in the Bay of Bengal
- 11% of total fish catch in Bangladesh
- 1% of GDP
- Up to 2.5 mill people along the supply chain (processing, marketing, transporting)



Hilsa fishery is under threat

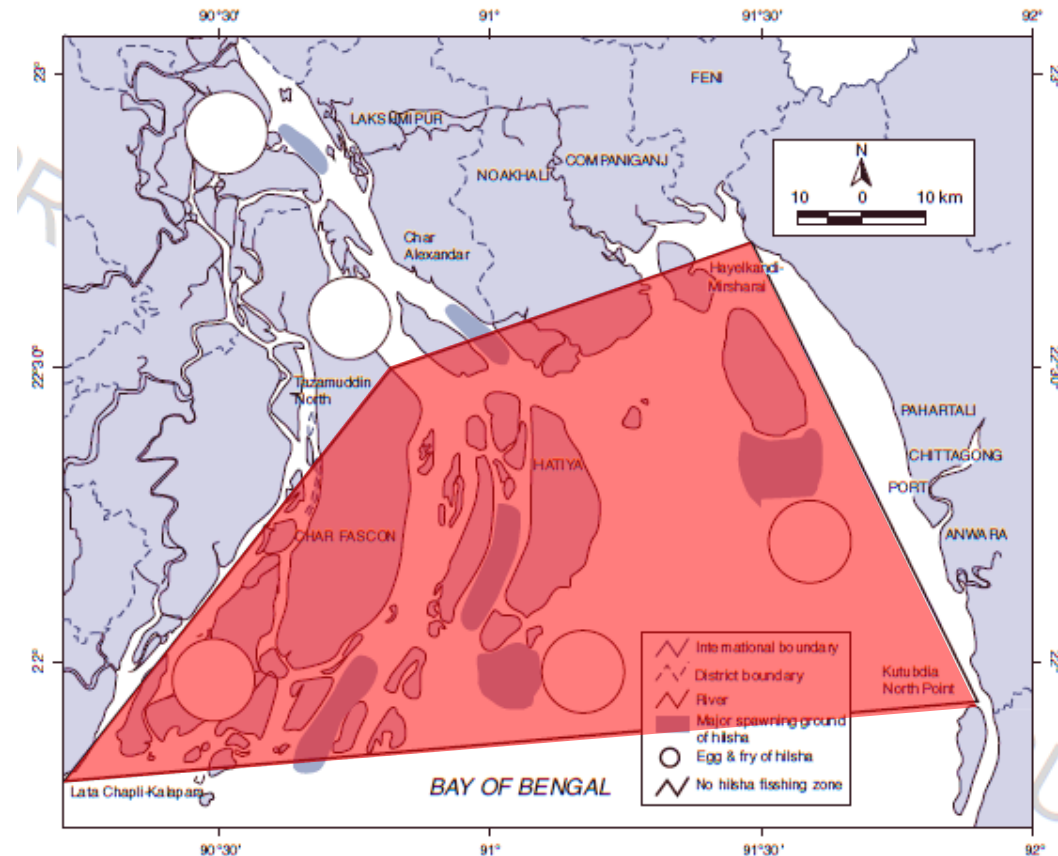
- Overfishing
- Damming and river diversion
- Pollution
- Climate change



Incentive-based management of hilsa (*T. Ilisha*) fishery

'Hilsa fisheries management action plan' 2003

- juvenile hilsa protection
- Conservation of gravid hilsa
- 5 hilsa sanctuaries
- No take season
- 40kg rice/HH and AIGAs provided



5 design essentials

1- understanding the ecology and biology of the fishery

- Enhanced understanding on spawning seasonality, migratory routes, feeding behaviour, etc.
- Science based fisheries management.
E.g. breeding season, sanctuaries, etc.
 - Ban period (11 days to 22 days)
 - Marine Fisheries Ordinance (marine sanctuaries)

2- technical and institutional capacities

- Lack of capacity for enforcement
 - Shifting towards 'co-management' by empowering local communities
- Data deficiency and lack of technical capacities to collect data
- Poor governance? Yes but...
- Work within a given technical and institutional capacity.

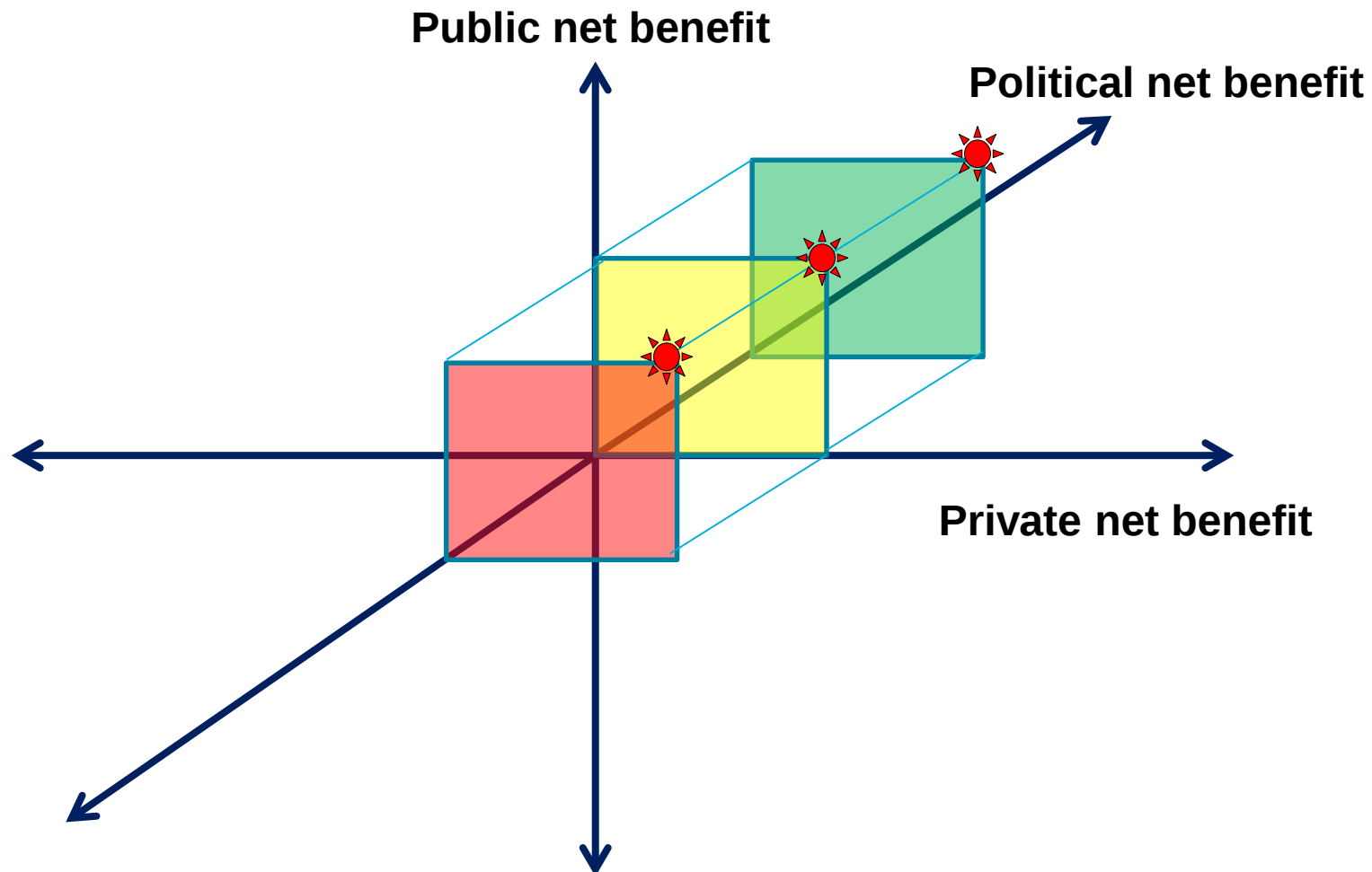
3- equitable benefit sharing mechanism

- Key to achieving local/national/international legitimacy and supporting management activities
- Mistargeting: exclusion and inclusion errors
- Convergence between preferred & actual compensation packages
- Agree on 'principles of benefit sharing'

4- Sustainable financing

- How to insulate the scheme from political and economic shocks?
- What happens when government priorities shift?
- ‘hilsa conservation fund’
 - A legally independent fund management system
 - Encourages private sector investment
 - Less prone to embezzlement or misuse of fund

5- think 3 dimensionally (net political gain)



Where next?

1) Identify non-fishing related threats

- Habitat change (siltation, pollution, etc.)
- Financial exclusion

1) Transboundary fisheries management system

- Regional cooperation (Myanmar, India and Bangladesh)

2) Employ low-cost method to monitoring and evaluation

- Using remotesensing data?



THANK YOU

 FishNet

FishNet is a community for all people interested in fisheries. We aim to inspire action for fisheries that work for today as well as the future. www.fishnet.ning.com

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Author name
Date

