The Importance of Mangroves to Capture and Culture Fisheries

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Abstract /Outline

A. Mangrove background

- area: 14 to 16 M ha in tropics/subtropics
- threats: conversion to settlements, agri/aquaculture, ports, etc.

B. Mangrove valuation

- various goods and services, e.g., coastal protection, fisheries, etc.
- total valuation:
- fisheries valuation: relative (to other services) vs absolute (food security) % protein in diet of low-income groups

C. Mangrove-associated fisheries

- by taxa permanent residents: fish, mollusks, crustaceans, other invertebrates transients (nursery function): crustaceans, fish
 by fisheries artisanal/small-scale, including gleaners (= food security of coastal poor) commercial
- by food group: mainly protein (vs carbohydrates, nutrients)

D. Nursery function of mangroves

- availability of food
- shelter from predation
- complex physical structure (aerial roots, canopy shade, high turbidity, fine sediments)

E. Global food production terrestrial vs aquatic \rightarrow wild \rightarrow marine/b'water \rightarrow seagrass beds culture freshwater \rightarrow coral reefs (depend on wild seed, fishmeal/oil)

F. Brackishwater Pond Aquaculture

- ecological footprint
- 4:1 mangrove-pond ratio
- Mangrove-Friendly Aquaculture models

G. Mangrove Rehabilitation

- seafront planting vs (abandoned) pond-mangrove reversion
- tenurial status of abandoned ponds
- FLA system

Keywords: mangrove, mangrove-associated fisheries, rehabilitation