Protection of Wetlands

Sri Lanka's Perspective

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Introduction

- Small island state; area 65,000 km²;
- Rich natural capital
- 103 rivers flowing from highland region
- 28 big rivers with basin area exceeding 500km^{2.}
- Mahaweli, the biggest river, has a catchment area of 10237 km²
- Approximately 20 Million population

Sri Lanka Wetlands

- 198,172 hectares of Wetlands
- 3 categories and 36 subcategories of wetlands (National Wetlands Directory of Sri Lanka)
 - Freshwater / Inland wetlands
 - Riverine (Deltas, permanent rivers, seasonal rivers, floodplains/villu wetlands, permanent fresh water lakes, seasonal intermittent lakes)
 - Palustrine (permanent fresh water marshes, seasonal intermittent marshes, peat lands, shrub dominated marshes, springs
 - Saltwater (Coastal and marine wetland)
 - Marine (shallow marine waters, marine beds, coral reefs, rocky reefs & shores, sand/shingle shores)
 - Estuarine (estuaries, tidal mudflats, salt marshes, mangroves)
 - Lacustrine (saline/brackish lakes (inland Villius), seasonal saline lakes, lagoons)
 - Palustrine (Permanent saline / brackish marshes, seasonal saline marshes)

Manmade

- Geothermal (Hydropower reservoirs)
- Aqua-cultural (farm / shrimp ponds)
- Agricultural (farms/small tanks irrigated land, seasonal flood fields).
- Industrial & urban (salt pens, reservoirs/barrages, gravel / brick / clay pits, sewerage / treatment ponds, canals.

Sri Lanka Wetlands

- Streams and rivers 103 (>4500kms)
- Villu Wetlands No natural large lakes but several flood plains (1200 hectares)
- Fresh water marshes connected to river basins with surface runoff river flood water and ground water seepage
- Freshwater swamp forest with trees that are adopted to grow in shallow stagnant water
- Estuaries and mangroves interconnected coastal wetlands (45 estuaries). Rapidly declining mangroves (about 10,000 hectares in 2006)
- Lagoons coastland wetlands separated from the sea by a low sand bank (about 42 lagoons)
- Coral Reefs & Sea grass beds sub tidal marine wetlands
- Inland Salt villus Villu's within the Wilpathu National Park containing a unique eco-system
- Tanks and reservoirs Nearly 10,000 man made tanks. Major irrigation works cover an area of 7820 hectares and minor irrigation tanks cover 52,250 hectares
- Rice Fields standing water bodies which are temporary and seasonal.
 780,000 hectares (12% of the inland land mass)

Threats to wetlands

- Reclamation → loss of wetlands and their bio diversity
- Clearing of vegetation → loss of habitat and species
- Water pollution
- Garbage disposal
- Regulation of water flow (gradual disappearance of lowland wetlands)
- Unplanned irrigation structures (changes in water quality)
- Mining (sand and corals)
- Poaching
- Ornamental fish & plant trade
- Recreation and tourism
- Negative/changing land use policies (housing & urban development)
- use of destructive fishing techniques
- Changing land use Natural Disasters

Legal and governance framework

- Historical approach to wetland protection
- Signed Ramsar convention in 1971 and ratified in 1990
- Plethora of policies, laws and institutions
- Absence of a wetland specific legislation and definition
- National Wetlands Policy of 2004 Cabinet approval

Legal and Governance Framework

- "wetlands" not defined in legislation
- Policy → Cabinet Approval → strong persuasive authority
- Wetlands considered part of the environmental framework
- Lack of understanding of the scope of wetlands (those within other protected areas such as forests are better conserved)

Legal and Governance Framework

- "legislative dilemma"
 - Environmental laws → protect and conserve
 - Other laws → manage and use
 - No laws to develop
- Absence of an enabling legal framework
 - For community participation in wetland conservation
 - Livelihood support
 - Encourage behavior change
- Gaps in the regulatory framework, duplication, lack of clarity (abuse of administrative discretion)

Way Forward

- Option 1 → Strengthen existing laws
 - Cumbersome process but doesn't add another layer
- Option 2

 Comprehensive and dedicated law
 - Overarching law; covering all wetlands (adds to the bureaucracy)
- Option 3 → Broad framework law
 - Carefully crafted definition
 - Clause incorporating that into the existing legal framework (core maintained with a degree of flexibility)

Way Forward

- Strengthen connected areas
 - Anti corruption
 - Judicial review
 - Innovative regulatory strategies (instead of command and control)
 - Community involvement
 - linking to the core (environmental laws); 1st layer (land use) and beyond (green energies) legal frameworks