Post Tsunami Living Lakes Conference
Restoration of Mangroves and Reestablishment of Livelihoods in Sri Lanka
Bentota Beach Hotel, Sri Lanka, 23 – 26 April 2007

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for the Protection of Nature

Mangroves

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Functions and Threats

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Conservation and restoration of ecosystem functions needs to play a central role in all forms of land use.

It is our urgent task to protect nature, not for the sake of nature, but for the sake of mankind.

Conservation, restoration and sustainable use: Need for action and research

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- conservation of the last wilderness areas
- restoration of degraded ecosystems
- (alternative) sustainable land use
- ecological benefits and their monetary value

Valuation (monetarisation) of ecosystem services

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- Carbon sequestration and storage
- Groundwater recharge
- Evapotranspiration and cooling
- Soil stability
- Filtering and disposal of pollutants
- Biodiversity

Net-sink ecosystems include living mires, old grow forests, steppes, clear water lakes, mangroves and coral reefs.

Conclusions

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Time is running short and solutions for our problems need to be found within our current economic structures. Of all the tasks before us, particularly the conservation and restoration of ecosystems that provide us and this Earth with necessary functions and benefits can only take place if we find ways to economically reward them. The dilemma of our current economic approach is that fundamental, increasingly scarce services performed by Nature have yet to receive their price tag.

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Distribution of Mangroves

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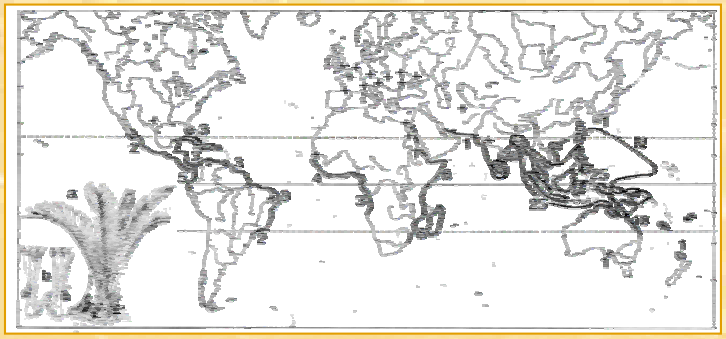

after SCHMITHÜSEN 1968, TACHTADZIAN 1980f., VARESCHI 1980

Distribution of Mangrove species

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Eastern Mangroves		Western Mangroves	
Tropical Asia Australia	East Africa	West Africa	Tropical America
Rhizophora	*mucronata*	*Rhizophora*	*mangle*
Rhizophora	*apiculata*	*Rhizophora*	*racemosa*
Bruguiera	*gymnorhiza*	*Avicennia*	*africana*
Ceriops	*tagal*	*Avicennia*	*germinans*
Kandelia	*candel*	*Laguncularia*	*racemosa*
Sonneratia	*alba*		
Xylocarpus	*granatum*		
Lumnitzera	*racemosa*		
Avicennia	*marina*		
Aegiceras	*corniculatum*		

Mangrove species of Venezuela

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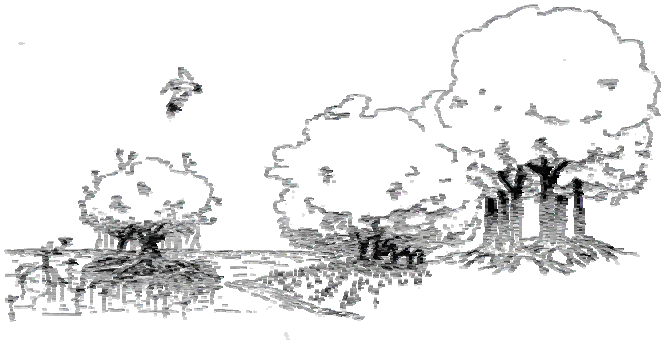

Red Mangrove, *Rhizophora* Black Mangrove, *Avicennia* White Mangrove, Laguncularia

after M. WEBER & R. TINNEY 1986

Indonesia: Borneo

Malaysia: Mangrove-forest

New Zealand: *Avicennia marina* (Mangroves of the north island)

Avicennia marina

Venezuela: Paria-peninsula

Venezuela: Los Roques, Mangroves-forest

Venezuela: Los Roques

Indonesia: Paddy fields on Sumatra

Shrimp-Farm in the north of the Monkey River (Owner / Operating company: Aqua Mar Belize Ltd.) (Source: GEO)

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Expansion of Shrimp farms on the Gulf of Fonseca (Honduras) between 1987 and 1999 (Source: GEO).