



# Climate Change, Mangrove & Sustainable Management

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Title

## Mangrove the Most Productive Ecosystem on the Planet

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Abstract

Mangroves are trees or large shrubs which grow within the intertidal zone in tropical and subtropical regions. They are most productive ecosystem on this planet. Population growth and urban development lead to increased demand for mangrove products. Ecosystem services provided by mangroves includes ecotourism, coastal area protection, habitat of endangered animals and many more. Mangrove conservation efforts are largely aimed at preventing destruction of mangrove ecosystems, and increasing coverage. A key issue is not just destruction but degradation of mangrove ecosystems, through pollution, siltation, loss of biodiversity. Countries are beginning to recognize changing threats through changing policies and strategies.

Poster

### MANGROVE: THE MOST PRODUCTIVE ECOSYSTEM ON THE PLANET

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**ABSTRACT:**  
Mangroves are trees or large shrubs which grow within the intertidal zone in tropical and subtropical regions. They are most productive ecosystem on this planet. Population growth and urban development lead to increased demand for mangrove products. Ecosystem services provided by mangroves includes ecotourism, coastal area protection, habitat of endangered animals and many more. Mangrove conservation efforts are largely aimed at preventing destruction of mangrove ecosystems, and increasing coverage. A key issue is not just destruction but *degradation* of mangrove ecosystems, through pollution, siltation, loss of biodiversity. Countries are beginning to recognize changing threats through changing policies and strategies.  
**Keywords:** Mangroves, ecosystem, biodiversity.

Distribution of Mangroves across the world...  
(Ref. Mangrove world atlas)

**THREATS:** From a changing set of pressures  
**Consumptive:** Tannin, timber, fuel etc  
**NonConsumptive:** Land use conflicts, pollution, cutting for development, etc

Half of Indonesia's mangroves gone in less than thirty years  
(03/23/2010) The *Jakarta Post* reports that, according to the local NGO People's Coalition for Justice in Fisheries (Kiar), Indonesia's has lost 2.2 million hectares of mangroves in less than thirty years, going from covering 4.2 million hectares in 1982 to just 2 million hectares today.  
Commercial fish smoking is the "most pervasive" threat to mangrove forests in West Africa  
(12/06/2009) An improved system for commercial fish smoking could reduce destruction of mangrove forests and generate human health benefits, report researchers writing in *Tropical Conservation Science*, an open-access journal published by mongabay.com.

**INTRODUCTION:**  
Mangroves are trees or large shrubs which grow within the intertidal zone in tropical and subtropical regions and have special adaptations to survive in this environment. They are generally distributed above and below the equator, between the 20°C isotherms. They are in fact rare at the global scale, covering less than 1% of all tropical forests worldwide (Spalding et al 2010) including mangroves in the country. The Sundarbans are world's largest area of mangrove forests

**WHY MANGROVES SO IMPORTANT:**

They are vital component of  
**Pyramid of the Life**

Clean water

Carbon sequestration

Resource for future generation

Protecting coastlines, people, and property

**CONSERVATION**

- ✓ **International Obligations** to conserve Mangrove ecosystem Such as Ramsar, conservation of world heritage, Convention on Biodiversity.
- ✓ **Green India Mission** aim to further increase the forest/tree cover to the extent of 5 million hectares and improve quality of forest/tree cover
- ✓ initiative to protect coastal livelihood is '**Mangroves for the Future (MFF)**' coordinated by (IUCN) in India.
- ✓ **Micropropagation** technique to conserve rare mangrove species

**REFERENCES:**

1. [www.iucn.org](http://www.iucn.org)  
2. Mangrove Action Project

3. India mangrove matrix  
4. Few research articles

Stay home stay safe.