

# **Rehabilitating Forests and Extending Tree Cover in South Asia**

**A synthesis**

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# South Asia: Facts

- Afghanistan, Bangladesh, Bhutan, Maldives, Myanmar, Nepal, India, Sri Lanka
- Total Area 368 million hectares
- Comprises barely 2.5% of the global land surface but supports 18% of world's population
- Average population density of the region 350/sq km (world average 45), of which two third rural
- 10% of world's biodiversity

# Four Broad Geographical Areas

- The Northern Mountains with the Great Himalayas
- Vast plains formed by alluvial deposits carried by great rivers like Indus, Ganges and Brahmaputra
- The southern Deccan Peninsula bounded by the Western and the Eastern Ghats
- The coastal plains and islands

# Major Forest Types

- **Tropical**

- Wet evergreen with rainfall above 2000 mm
- Semi evergreen with rainfall 1000-2000 mm
- Moist deciduous
- Littoral and Swamp along the coastline
- Dry deciduous
- Thorn forests
- Dry evergreen

- **Sub tropical**

- Broad leaved forests
- Pine forests
- Dry evergreen

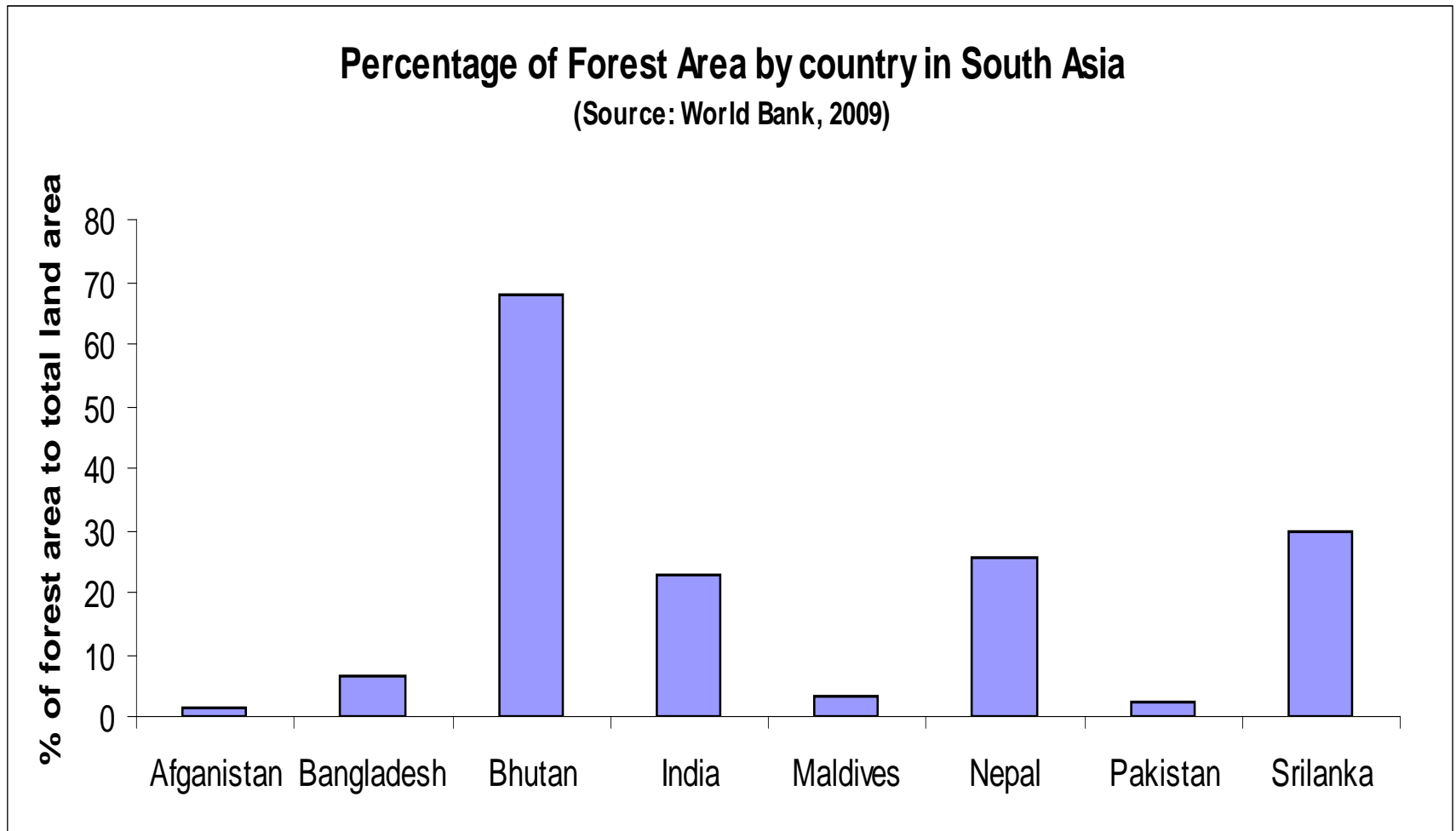
- **Temperate**

- Montane wet temperate at higher altitudes in Himalayas & southern Hills
- Moist temperate in northern hills
- Dry temperate in western Himalayas

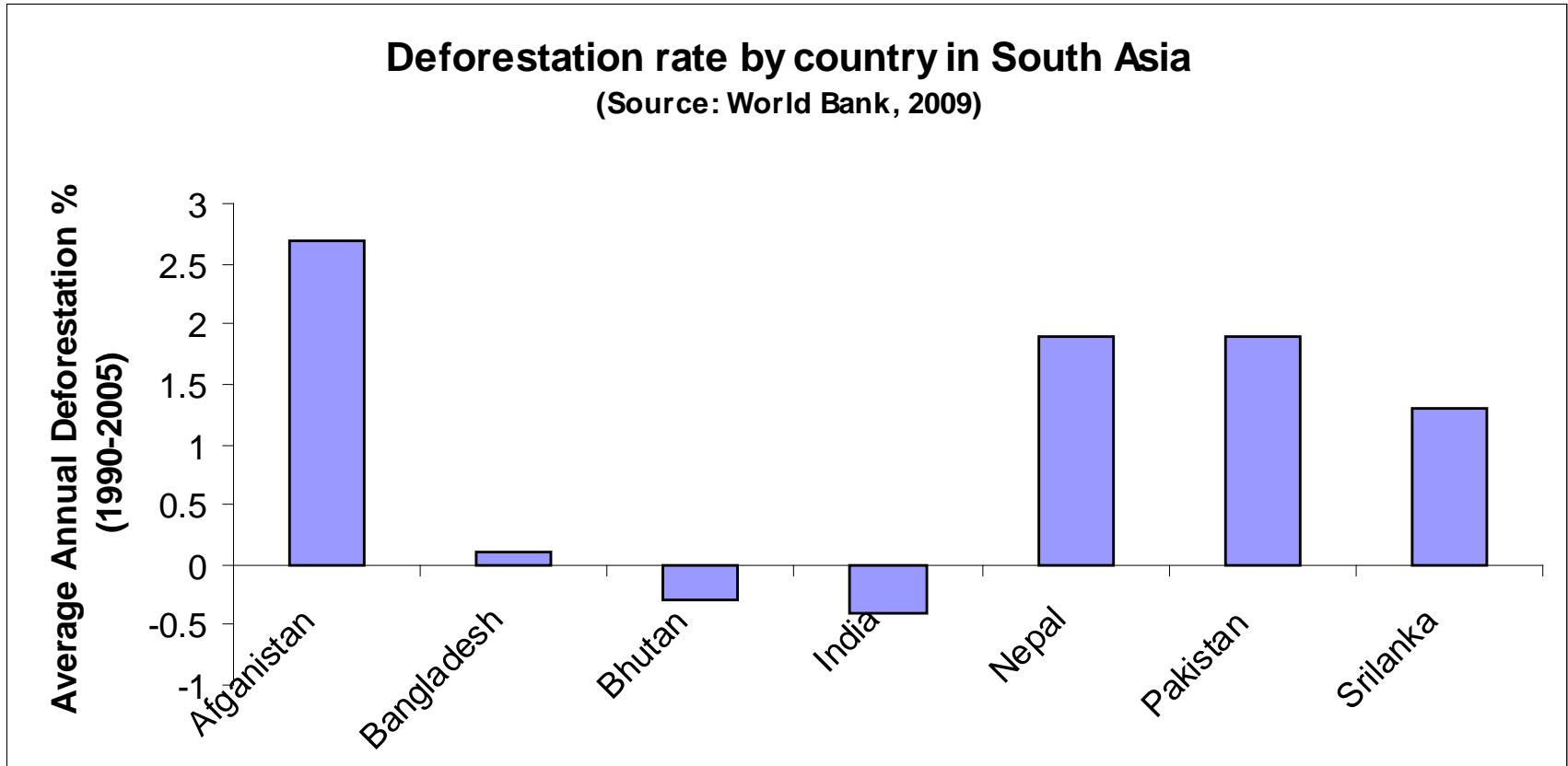
- **Alpine**

- Sub-alpine above 2750 m elevation in Himalayas
- Alpine scrub just below the snow line

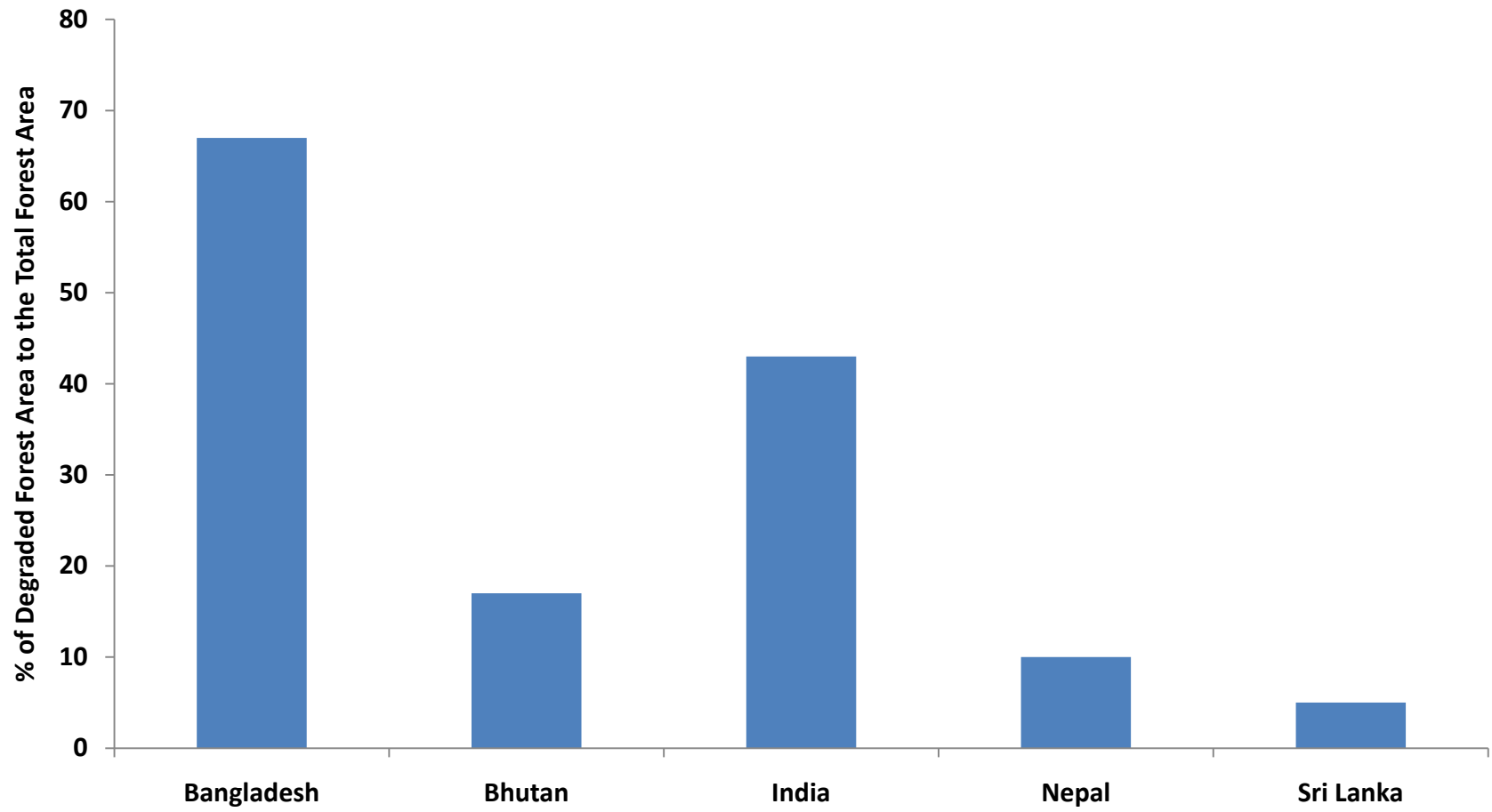
# Forest Coverage in South Asian Countries



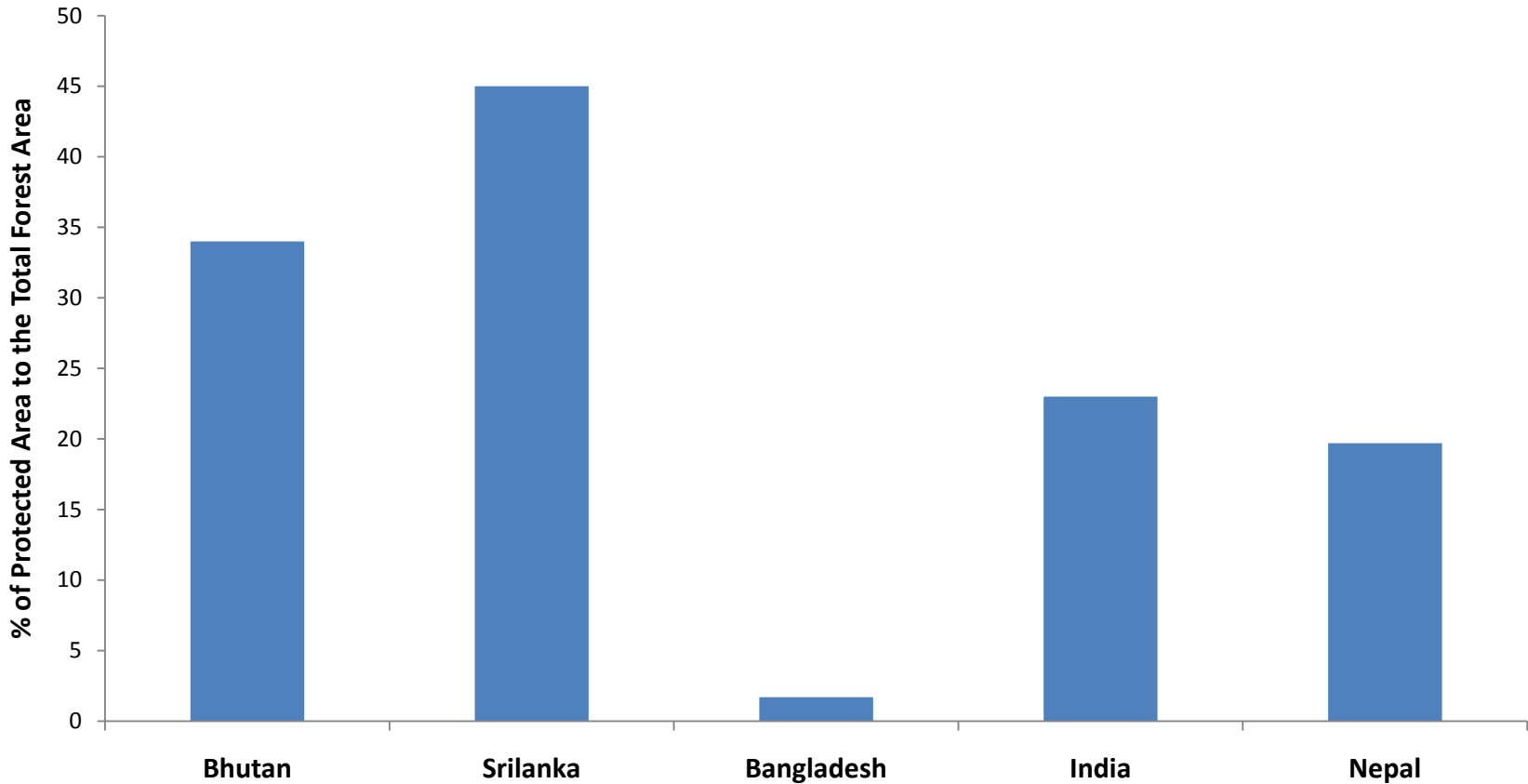
# Deforestation Trend in South Asia



# Extent of Forest Degradation in South Asia



# Protected Area Establishment and Management



# Deforestation and Degradation

- Expansion of Agriculture, population pressure and poverty
- Grazing and Forest fire
- Invasives like *Lantana* have damaged but some like *Prosopis juliflora* are useful and in the process of naturalizing
- Unintentional negative effects of forest policies
- Insecure land tenure rights
- Construction of roads, dams and mining activities
- Excessive extraction of timber and other non wood products
- Market failures – little recognition of ecological services
- Poor coordination among different sectors
- Political instability

# Current Approaches of Forest Rehabilitation

- Forest Law and Policy
- Community Based Forest Management
- Establishment of Protected Area Network
- Special Rehabilitation Projects

# Forest Policies and laws

- **Bhutan & Nepal:** policies for conservation and protection through decentralization & community participation
- **Bangladesh:** policies for increasing tree cover in agricultural and urban landscapes
- **India** – many initiatives in Joint forest management and resolving tenure issues with Forest Rights Act, very limited success so far
- **Pakistan** –sought UNFCCC assistance in conducting a National Economic, Environment and Development Study to engage in mitigation and adaptation activities
- **Sri Lanka:** enhancement of productivity of traditional home gardens, agroforestry and forest plantations

# Community-Based Forest Management

- **India:** Joint Forest Management
- **Nepal:** traditional resource users called Community Forest User Groups
- **Bhutan:** limited rural participation - only in organizing grazing and fodder collection, manpower for replanting activities etc.
- **Bangladesh:** participatory management of Sal forests, homestead plantations, participatory buffer zone plantations, urban greening
- **Sri Lanka:** forest rehabilitation through collaboration between governmental and non-governmental organizations

# Reasons for the success of CBFM

- Effective and acceptable leadership through local institutions
- Access to forest resources for the community has encouraged their participation
- Freedom to decide and act
- Local knowledge help in managing forests
- Long-term assurance of returns encourages
- Project results far beyond forest regeneration

# Special Rehabilitation Projects

- Green India Mission and National Mission for Sustaining the Himalayan Ecosystem under National Climate Change Action Plan
- REDD initiative in Nepal
- Combating desertification on Thar Desert boundaries in Pakistan and India
- Reforestation of Mangrove Ecosystem in Bangladesh and India
- Tiger Conservation projects in Nepal, Bangladesh and India

# Problems and Failures in Forest Rehabilitation

- Low priority for the government
- Ecological services not internalized
- Lack of clarity of tenure systems
- Non applicability of CBFM in most areas
- The poor do not always benefit

# Innovative Approaches to Promote Forest Rehabilitation

- Climate Change Mitigation
- UNFCCC Adaptation Fund can help create large employment opportunities in forestry
- Landscape Management Planning Approach
- Tenure System reforms
- Revision of Policies
- Payment for Environmental Service (PES)
- Conservation Based Economic Activities
- Involving Private Companies in Forest Rehabilitation Activities
- Forest Sector Funding

# Afghanistan forestry in crisis

- Severe degradation due to uncontrolled logging and overgrazing on account of failures to enforce both formal national laws and customary regulations
- Very little availability of firewood - a real crisis
- Forest-based CC mitigation activities offer significant opportunities can supplement livelihoods of poor by enhancing access to basic energy
- Short-rotation energy plantations could generate carbon credits from C sequestration and fossil energy substitution and increasing incomes from forest products
- None of the warring factions oppose tree husbandry - women can generate income from nursery-related activities and fuelwood collection
- Urgent need to create effective village-level institutions with capacity to manage tree-planting activities, local-level natural resource management and benefit distribution.
- Expertise in Bangladesh, India and Nepal in creating and empowering village-level institutions would be of much use if transferred to the Afghan context
- capacity building required

## An extraordinary overlap between forest map of India and poverty map of India

- Almost half of India's forests are in central Indian provinces of Chhatisgarh, Jharkhand, Madhya Pradesh, Andhra Pradesh, Maharashtra and Orissa
- In all these places poverty is highest in India and also severe poverty driven left wing extremism
- Do forests lead to poverty particularly with stress on conservation by excluding resources below the ground and those above from local economy?

*Thank You*

