

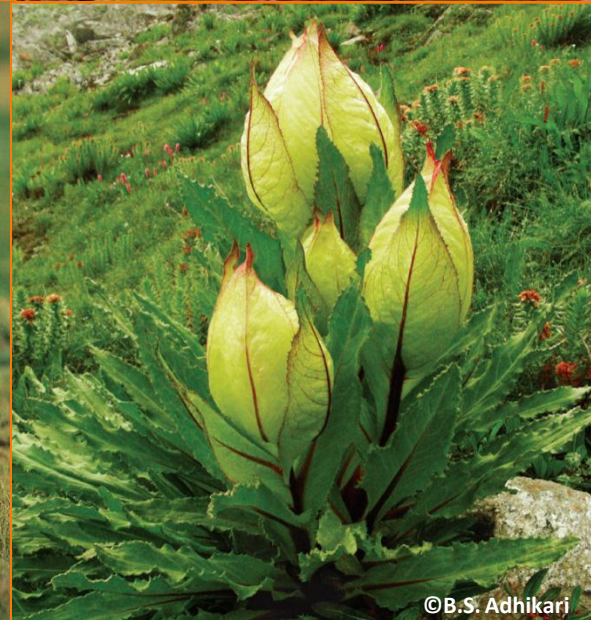
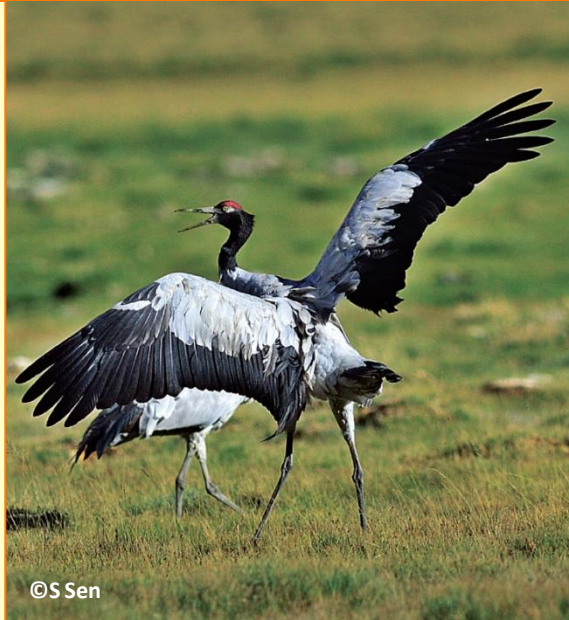
**WHY
CONSERVE
FORESTS ?**

Importance of Forests



**An Overview of India's
Forests & Wildlife**

Home to innumerable endangered, rare and threatened species



Six World Heritage Sites

(Nanda Devi, Kaziranga, Manas, Sunderbans, Western Ghats Keoladeo)



102 National Parks and 527 Wildlife Sanctuaries



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7,57,060 Wetlands covering area 15.26 mha

(Source: National Wetland Atlas, 2011)



465 Important Bird Areas in India

(Source: Islam and Rahmani 2004)



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©Anchit



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Goods and services from nature

Nothing in the nature lives for itself.
Rivers don't drink their own water.
Trees don't eat their own fruit.
Sun doesn't give heat for itself.
Flowers don't spread fragrance for themselves.

**LIVING FOR OTHERS IS THE
RULE OF NATURE**



We depend on forests for our well-being

Provisioning services

- Fuel, Food & Fibre
- Water
- Genetic resources

Regulating Services

- Climate regulation
- Water and waste purification
- Air purification
- Erosion control
- Natural hazards mitigation
- Pollination
- Biological control

Cultural Services

- Aesthetics, Landscape value, recreation and tourism
- Cultural values and inspirational services

Supporting Services

- *Soil formation*

+ Resilience

e.g. to climate change

Source of sustenance to over 275 million people

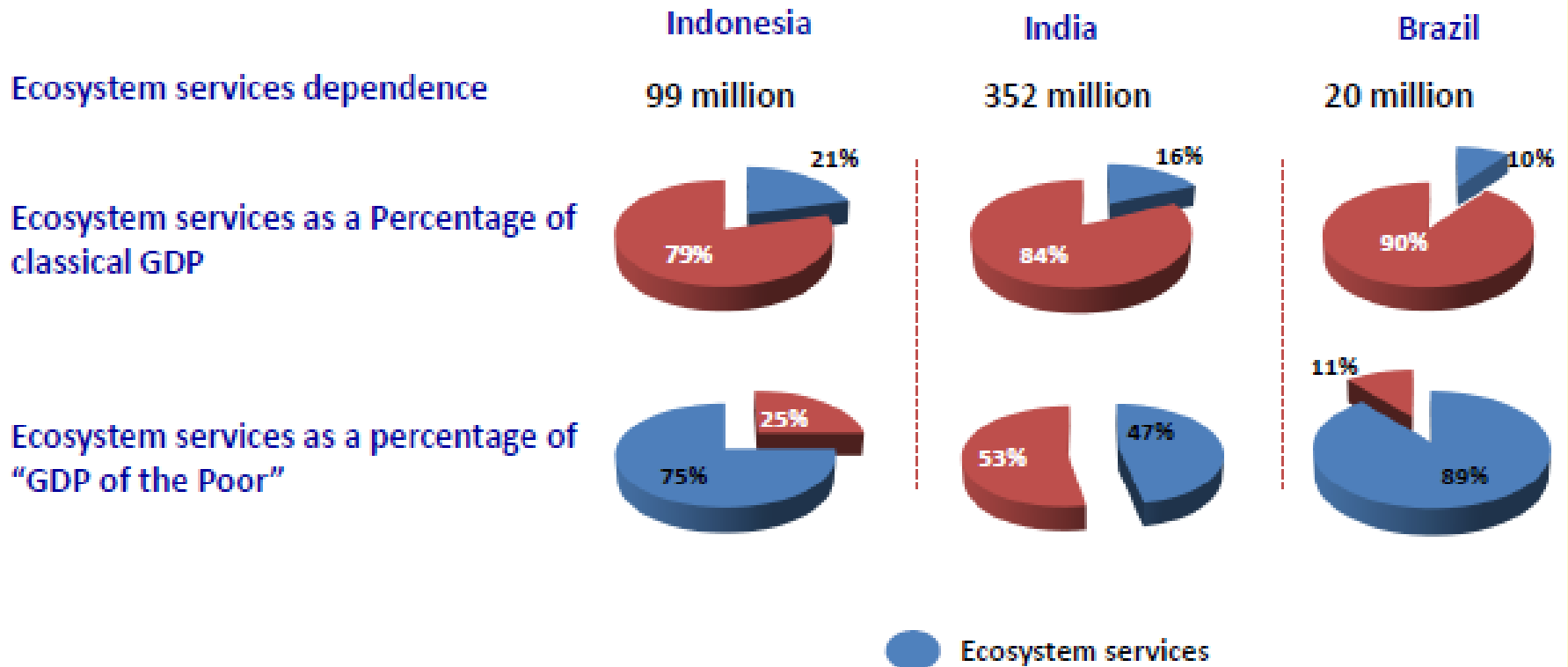


Meets over 56% rural fuel and fodder needs



Dependence of Poor on Ecosystem Services

"GDP of the Poor" is the most seriously hit by ecosystem losses



Source: Gundimeda and Sukhdev, TEEB for National Policy

The Economics of Ecosystems & Biodiversity (TEEB)

**85,000 JFM villages ~ INR 30,000 crore / yr
(INR 0.35 crore/ village/ yr)**



Eco-tourism: US\$1.7 billion



Present signage

Present signage

Timber and NTFP ~ US\$ 2 billion



Direct employment to millions



Mitigating Water Crisis

(Shimla, Bhuj, Sukhna-Sukhomajri and many others)



ES valuation: complex

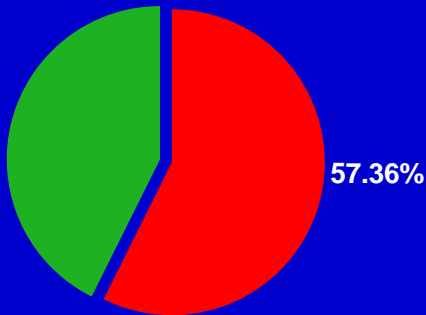
Present models unable to capture full values

- Various ES benefits in Uttarakhand: US\$ 2.46 billion per year, but climate moderation effects of forests un-quantified and not included (Semwal et al. 2007)
- 911 km² of Mangroves in Gujarat: benefits INR 1,603 Crore per year (fodder, timber, firewood, fishing, storm protection; other regulatory services not included ; Hirway and Goswmy 2004)
- 39 mHa of Dense Forests of India prevented soil loss @ INR 5,000 Crore and additional recharge of ground water @ INR 132 crores in 2003; Loss of Dense forests → INR 8,126 per Ha of flood damage (Kumar et al. 2006)
- A 12 year old plantation in Gujarat accumulated INR 2124/ha worth of Phosphorus and INR 5112/ha worth of Potassium, but lost INR 948/ha worth of Nitrogen (Kiran and Kaur 2011)

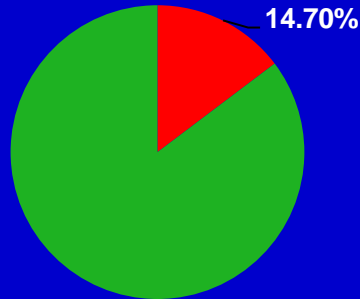
India's forests face tremendous Biotic pressure



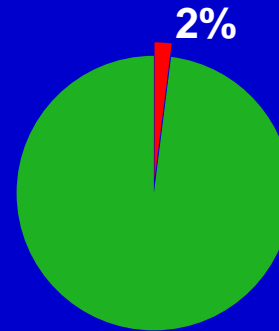
Buffalo



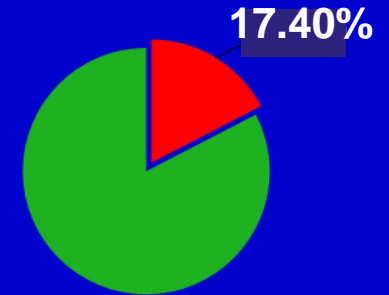
Cattle



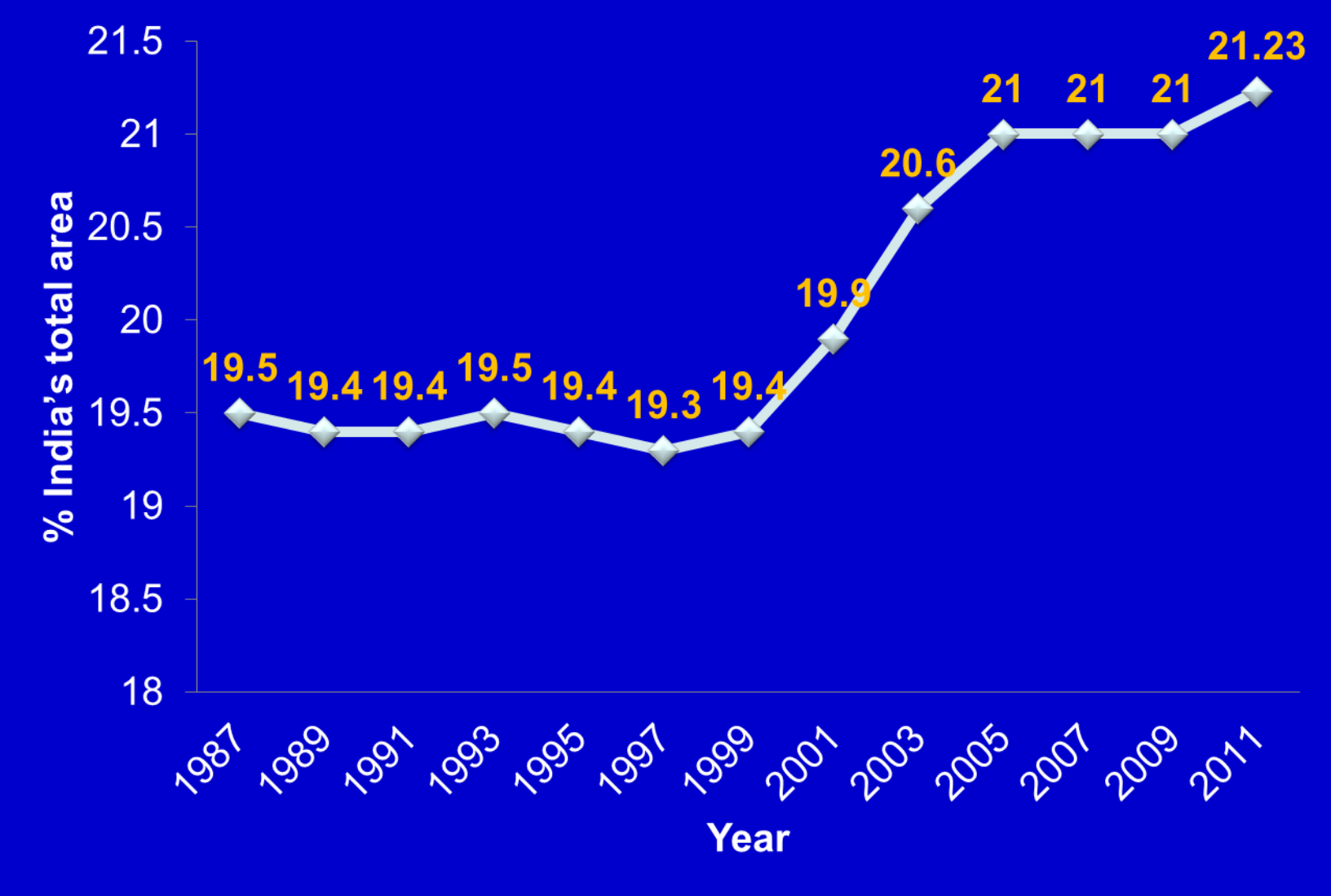
Geographical Area



Human



India's Forest Cover– 1987 - 2011



DIRECTIVE PRINCIPLES OF STATE POLICY **(Article 48 (A) of Constitution)**

Protection and improvement of environment and safeguarding of forest & Wildlife.

“The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country”.

FUNDAMENTAL DUTIES

(Article 51- A & G)

For protection of Forests & Wildlife

“It shall be the duty of every citizen of India – To protect and improve the natural environment including forests, lakes, rivers, and wildlife, and to have compassion for living creatures”.

**(42ND AMENDMENT TO THE
CONSTITUTION)**

NATIONAL FOREST POLICY, 1951 AND 1988-

Besides others:

To bring 33% of geographic area under Tree cover in plain areas & 66% in hilly terrains.

THE STATUS OF

FORESTS

IN

A.P. & T.S.

Forest map of undivided Andhra Pradesh

Teak Forests in
Godavari Basin

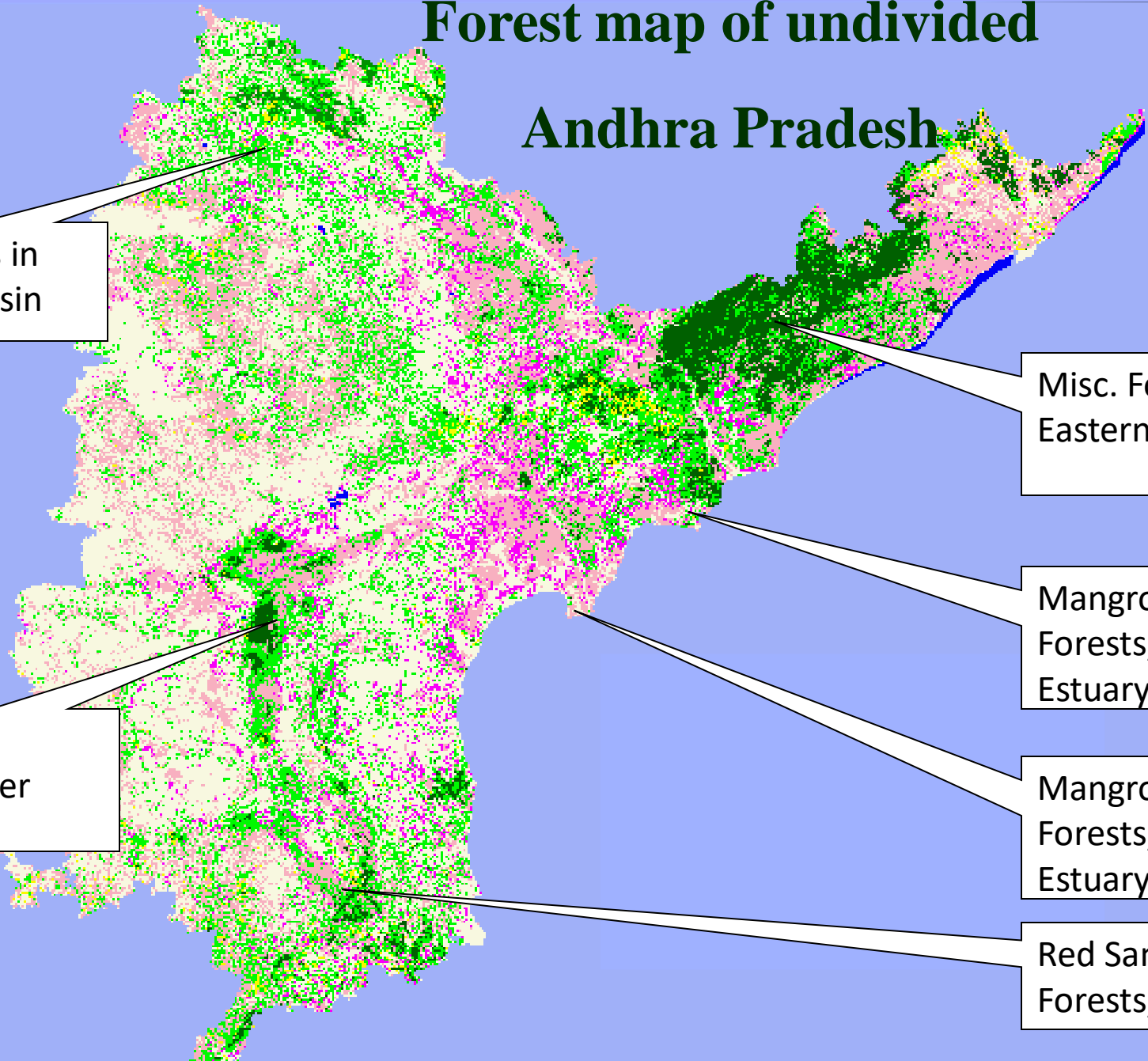
Misc. Forests,
Eastern Ghats

Mangrove
Forests, Godavari
Estuary

Mangrove
Forests, Krishna
Estuary

Red Sanders
Forests,

Nalla Mala
Forests, Tiger
Reserve



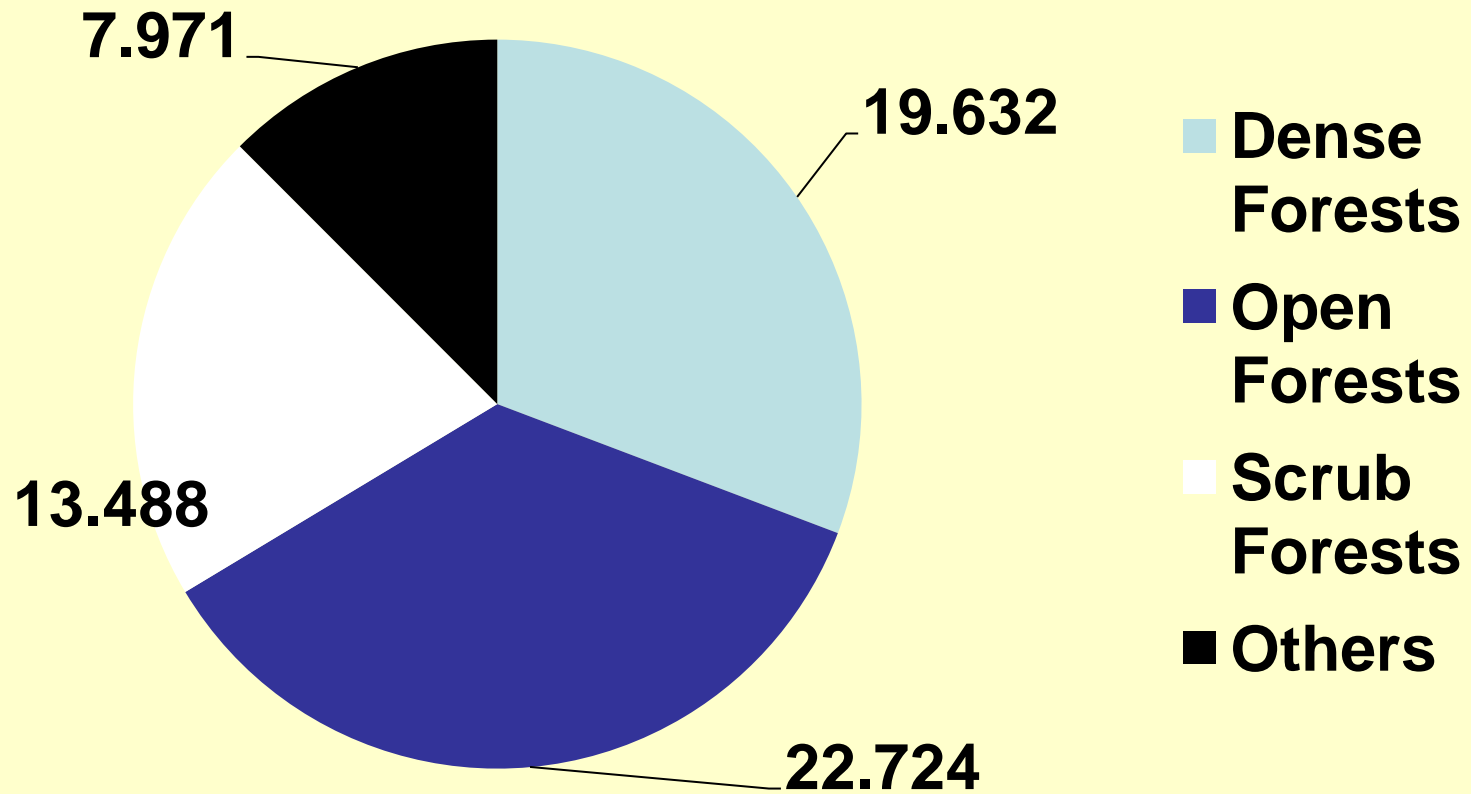
Profile of Forests in Andhra Pradesh

**Total Geographic area:
275 .07 Lakh Ha**

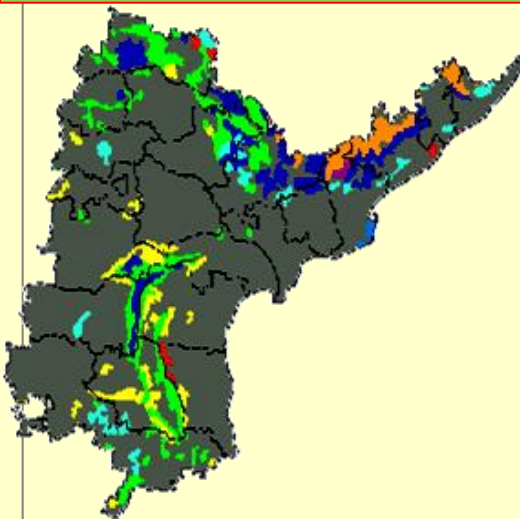
**Area under Forest Cover:
63.81 Lakh ha (23.20%)**

**Tree cover outside Forests:
9.13 Lakh ha (3.32 %)**

Quality of Forests in Andhra Pradesh



Protected Area Network



Protected area	Area in Sq Km	% of State area	% of Forest area
6 National Parks	1388.39	0.14 %	2.18 %
21 Sanctuaries	11614.96	5.62 %	18.20 %
Total :	13005.72	5.76%	20.38%

- The state is endowed with rich bio-diversity with 3150 plant, 103 mammal, 365 bird, 100 reptile and over 15000 invertebrate species.
- The State has endemic species like Jerdon's Courser, Golden Gecko, Slender Loris, Red sanders, *Cycas beddomie* etc.,

INVENTORY OF FOREST RESOURCES

Total Growing Stock (G.S.): 232.08 mCuM

GS in 1970s: 291.394 mCuM

Change in 3 decades: 60 mCuM

Avg. No. of Stems per Ha: 179

Average loss of GS p.a. 2mCuM

Avg. loss of stems: App. 4 million p.a.

Majority of trees in 20-30 cm dia class

Majority of trees young, matured trees less in no.

Regeneration inadequate/absent in 50% of forest area.

20% of Forest area highly prone to soil erosion.

66% of Forest area affected with Forest Fires.

Approx. 3.00 lakh Ha of forest area under encroachments.

Individual rights recognized over 4.00 Lakh Ha of forests area under FRA.

**QUALITATIVE AS WELL AS QUANTITATIVE
DEGRADATION OF FORESTS IN A.P.**



* hug a tree. **less** *
* they have **less** *
ISSUES than people
PROFILEBRAND.COM

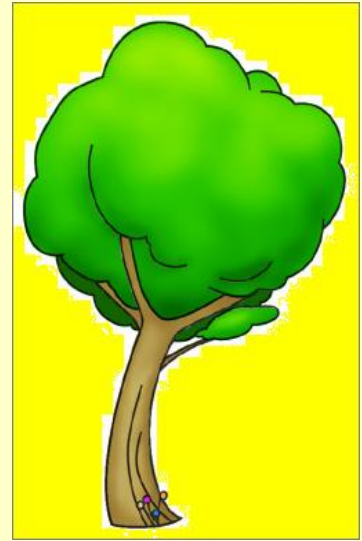
*The trees are God's great
alphabets,*

*With them He writes in shining
green,*

*Across the world His thoughts
serene.*



THANK YOU!



Each tree
counts !!