#### **Reducing Emissions from Deforestation in Developing Countries**

#### 2<sup>nd</sup> Workshop: 7-9 March 2007 Cairns, Australia The Indian Proposal

भारतीय वानिकी अनुसंधान एवं शिक्षा परिषद् INDIAN COUNCIL OF FORESTRY RESEARCH & EDUCATION

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#### **Indian Proposal**

# Alternative Policy Approach to Avoided Deforestation

#### **Compensated Conservation**

#### "Compensated Reduction"

## Financial incentives to Non Annex 1 countries

for

## reducing present annual deforestation rate and stabilizing it in future

Compensated Reduction A Negative Concept Proposes Incentive for

**Countries with high deforestation** rates

Ignores countries improving forest cover

India made its stand clear in Rome Workshop

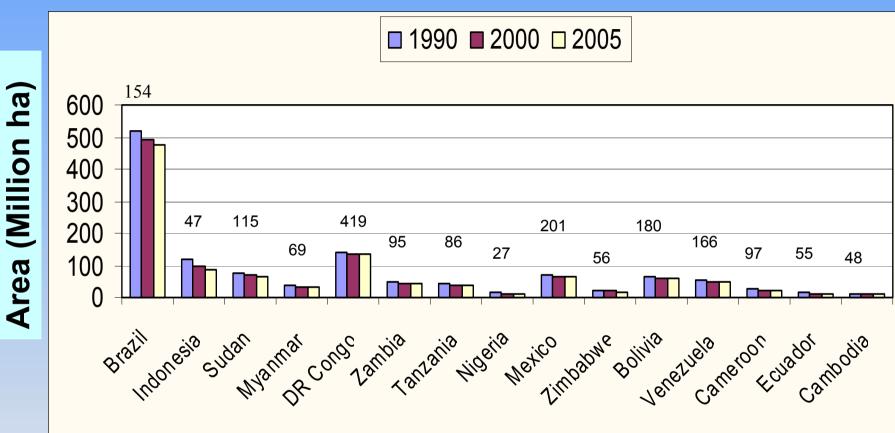
**Avoiding Deforestation** (leading to compensated reduction) in developing countries not part of Kyoto Protocol or CDM

Forested Nations Two Groups

- Nations with decreasing Forest Cover
- Nations with increasing Forest Cover/Growing Stock

#### **Nations: Decreasing Forest Cover**

**Top 15 Non Annex 1 Countries** 

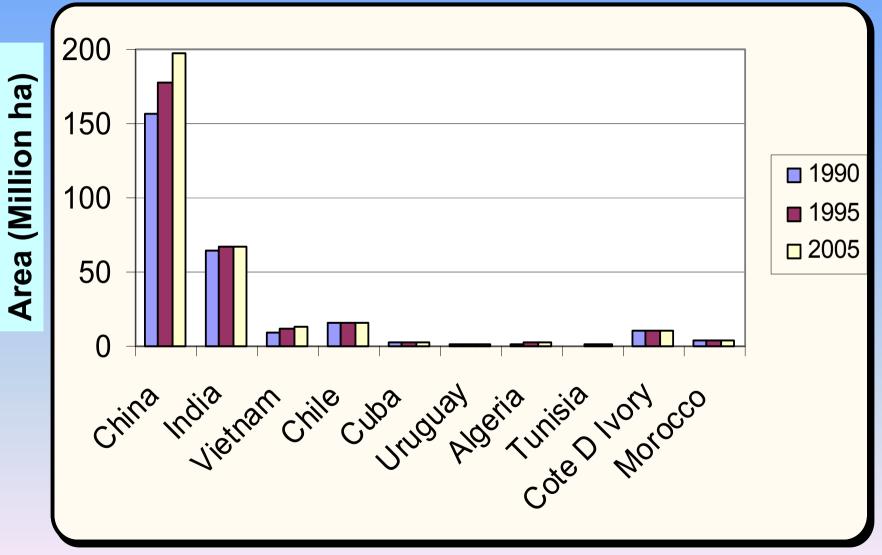


Numbers above the bars represent the years needed to reach zero forest cover with present rate of deforestation (from 2005)

Source: FRA 2005 (FAO 2005)

## **Nations: Increasing Forest Cover**

**Top 10 Non Annex 1 Countries** 



Source: FRA 2005 (FAO, 2005)

#### Change in extent of Forest Cover and wooded lands 1990-2005

(Excluding Annex I Countries, Data Source: FAO, 2005)						
5. No.	Countries	Number of Countries	Area 1,000 ha		Annual Change	
			1990	2005	1,000 ha/ year	%
1	Non Annex Countries with increasing forest cover and other wooded lands	27	443,092	479,624	2,436	+0.55
2	Non Annex Countries with decreasing forest cover and other wooded lands	74	2484,885	2283,436	13,430	- 0.54
3	Countries with negligible or No change	90	-	-	-	-

# Which Countries to be Rewarded?

Nations with decreasing Forest Cover
Or

 Nations with increasing Forest Cover/Growing Stock Compensated Reduction" for Nations with Decreasing Forest Cover?

- Rewarding policies and activities with demonstrated disregard for sustainable development reflected in continued deforestation of tropical forests
- Intentional disregard for the forest conservation policies
- Incentive for slowing down the deforestation rate that only prolongs the time-frame for complete destruction of tropical forests
- Supporting such concept is against the Non-legally Binding Forest Principles of Agenda 21.

## Why Alternative Indian Proposal?

- Avoidance of deforestation will defeat the very preamble of UNFCCC and Kyoto Protocol (sustainable development)
- Capable of shifting attention of Annex 1 countries from domestic action for GHG reduction
- Nations not managing forests in a sustainable manner stand to benefit from the proposal
- Nations who have implemented strong conservation regulations put at disadvantage

#### **Conservation Based Policy Approach**

- Countries like India that have implemented strong conservation measures and regulations also need to be suitably compensated
- t is essential to identify different approaches to educe emission from deforestation
- Conservation and sustainable forest nanagement based approach for providing ositive incentives for Carbon conserved/gained hrough sustainably managed forests be suitably rewarded

#### **Concept of Compensated Conservation**

- Countries implementing effective conservation policies: increasing their forest cover and in turn reducing emission from LULUCF Sector in spite of huge population pressure need to be rewarded for their Carbon Conservation initiatives
- India instead proposes the concept of "Compensated Conservation" as an alternative to the principle of "Compensated Reduction"

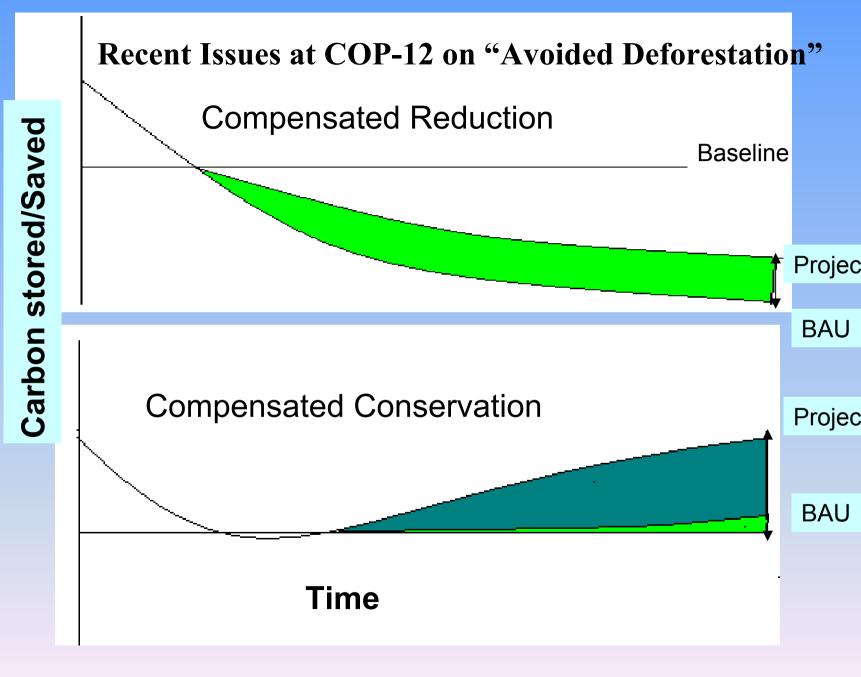
#### **Proposed Policy Approach and Incentives**

India proposes that the countries like India that have implemented strong conservation measures and regulations be suitably compensated

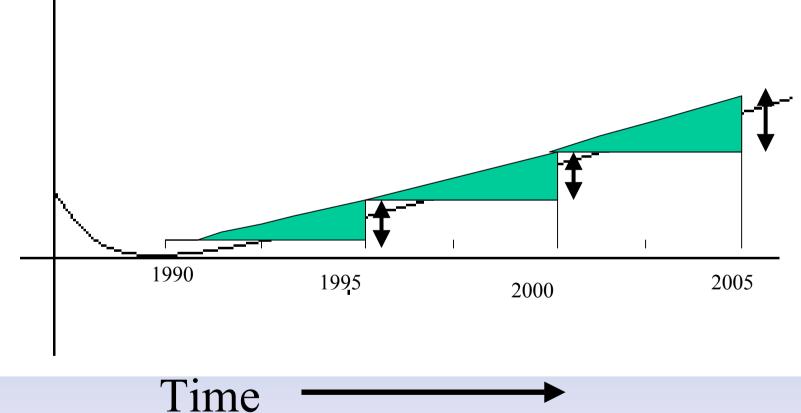
The proposed mechanism of "Compensated Conservation" intends to compensate countries for maintaining and increasing forests as carbon pools as a result of effective conservation and increase/improvement in forest cover backed by verifiable monitoring systems

#### The Mechanism....

- The incentive is proposed on <u>maintaining and</u> <u>increasing baseline carbon stocks</u> as a result of demonstrated implementation of strong conservation policies, and consequent increase/improvement in forest cover
- This would be a strong incentive for developing countries to maintain and develop their existing forests
- Determination of change in forest cover at national level



#### **Compensated Conservation Verification and Compensation**



Some Contentious issues can be addressed as follows:

Additionality: Proposal of Compensated Conservation intended to be outside the CDM of Kyoto Protocol

Baseline: Increment/decrease to be evaluated as gain/loss against a predetermined base year/cutoff year say 1990

Leakage: The Carbon sequestered through CDM A/R projects of host country to be deducted as leakage

#### Technical and Methodological Requirements

- Monitoring and Assessment: Remote sensing coupled with ground verification
- Modeling: To link forest type and cover with carbon stocks
- Verification: Through independent inspections

Success will lie in developing cost – effective technologies and procedures

#### Financial Mechanism

Proposed policy approach of "Compensated Conservation" intended to operate within the framework of international conventions, protocols, rules and regulations relating to climate change, <u>but</u> outside the CDM of Kyoto Protocol

Set up new financial mechanism linked to verifiable Cincrement

ODA, GEF, or Climate Change Adaptation Fund enhanced and made available for such incentives

#### **Capacity Building...**

- UNFCCC to strengthen capability (capacity building) for technological enhancement of nations on evolving systems and packages
- for verifiable and transparent assessment
- of Carbon stocks in forests/other wooded lands
- Brazilian and Indian monitoring systems (remote sensing) good examples

#### **Benefit Sharing**

 Fiscal incentives for "Compensated Conservation" to flow against one single National Project

 Recipient country to decide distribution of incentives amongst participating communities including investment in further conservation activities

#### **Baseline Stocks**

- Incentive for maintaining baseline stocks would act as insurance cover against loss of associated carbon stock
- Would also encourage developing countries for enhancement of extent and quality of forest cover, associated with increase in carbon stocks, and simultaneously contribute towards conservation of biodiversity

#### **Incremental Stocks**

• Such incentive to be provided for effecting expansion, increment or enrichment of forests/other wooded lands from a previously set baseline, that may be fixed at 1990 or other appropriate level

## **Compensated Conservation**

# **Case Study**

# India

India: Strong policy framework for conservation of natural forest

- THE NATIONAL FOREST POLICY, 1988 Envisages conservation and sustainable management of all types of forests
- Provisions for maintenance, conservation and enhancement of bio-diversity of forest ecosystems
- Maintenance and enhancement of forest resource productivity
- Increase in the extent of forest and tree cover
- Optimization of forest resource utilization

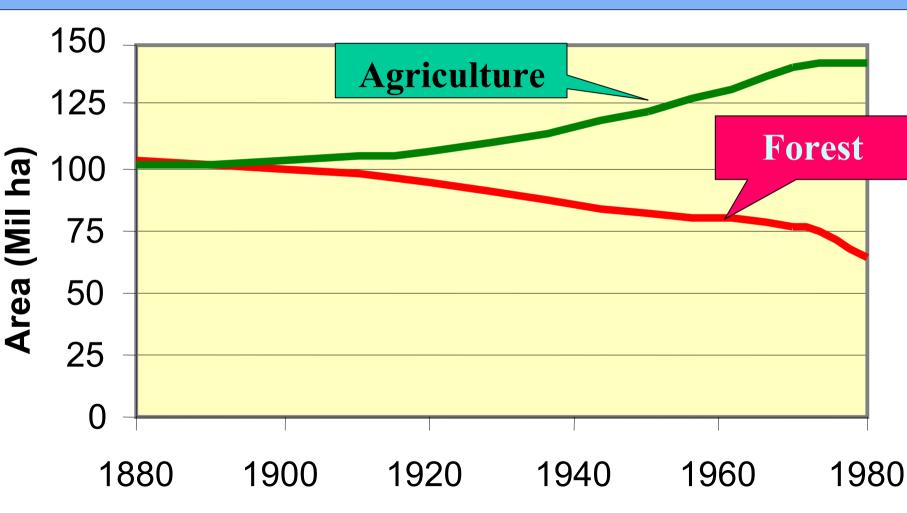
# India: Policy Framework.....

- The <u>directives of state policy</u> Articles 48 A and 51 A (g), Part IV of the Indian Constitution ensure protection and improvement of the environment and the safeguarding of forest and wildlife
- The Constitution also directs citizens to protect nature and also provides for forests and wildlife as <u>concurrent subjects under Schedule 8, List III,</u> and Entry 17-A and 17-B.

#### India: Policy Framework .....

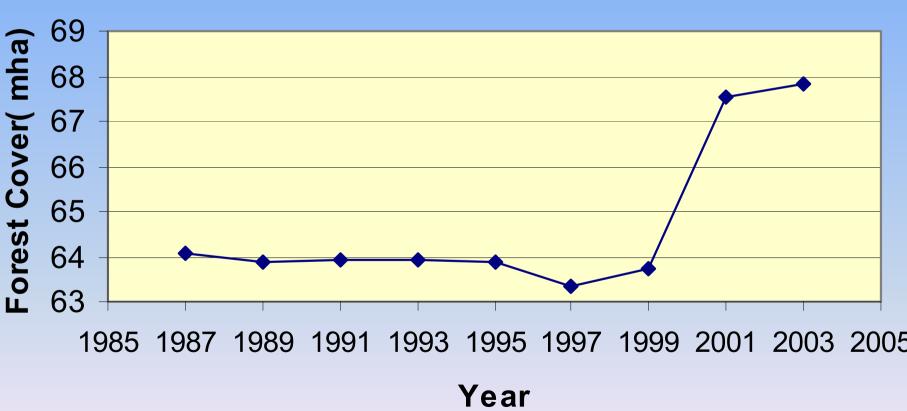
- . The National Forest Policy, 1988
- . The Indian Forest Act, 1927
- . Forest (Conservation) Act, 1980
- . Forest (Conservation) Rules, 2003
- . Biological Diversity Act, 2002
- . Biological Diversity Rules, 2004
- . The Indian Wildlife (Protection) Act, 1972
- . The National Board for Wild Life Rules, 2003

#### **Trends: Land Use in India** (Million ha)

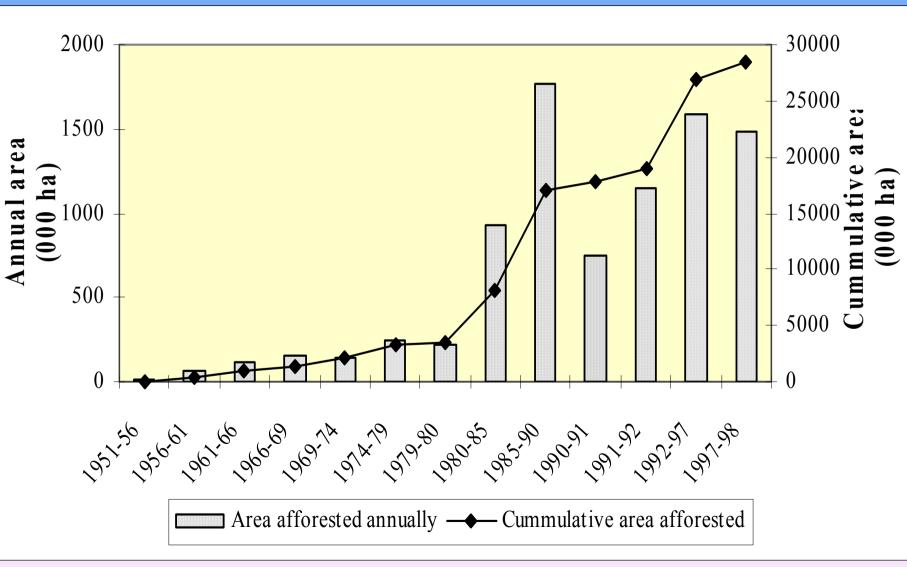


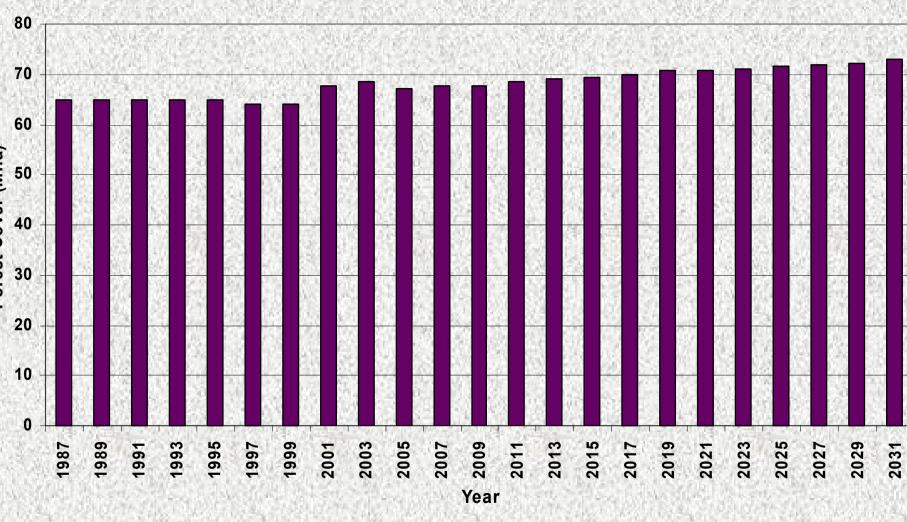
#### **Trends: Forest Cover In India** (SFR, 2003)

**Status of Forest Cover in India** 

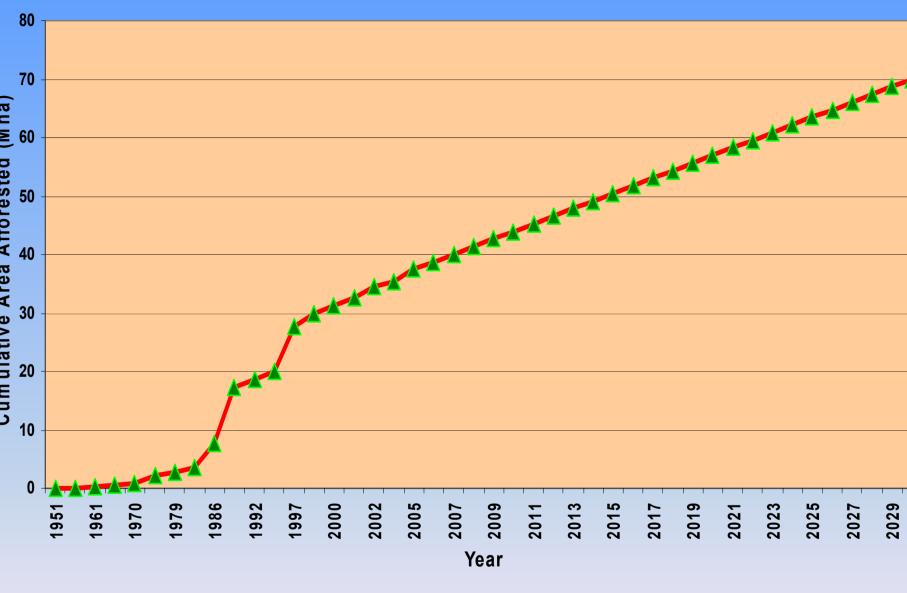


#### **Annual Afforestation In India**





rojected trend in forest cover under the current trend scenari (Source: Indian Institute of Science, 2006)



**Projected Afforestation under current trend scenario** 

(Source: Indian Institute of Science 2006)

## **Growing Stock: Indian Scenario**

- Growing stock 1980 : 4,196 million M<sup>3</sup>
- Net annual increment of 52 million M<sup>3</sup>
- {or 1.24 % of the growing stock (SFR, 1991)}.
- The growing stock in 1995: 4,740 million M<sup>3</sup>
- (with an average standing volume of 74.42 M<sup>3</sup>/ha)
- The growing stock 2003: 6,414 million M<sup>3</sup>
- This includes 4,782 million M<sup>3</sup> of growing stock within forest area and 1,632 million M<sup>3</sup> as trees outside forest (TOF)
- Estimates for removal of firewood from forests vary largely, and are not reliable. Emissions from such removals treated as zero (Carbon neutral)

#### Carbon Stock Projection: Indian Scenario

The model based projection of carbon stocks in India's forests and tree cover, as per studies of Indian Institute of Science, Bangalore (2006), reflects an increase in the carbon stocks as contained in the country's forests from 8.79 GtC in 2005 to 9.75 GtC in 2030

#### **Compensation Claim: India**

According to proposed policy approach of Compensated Conservation, for India, such incentive would not only be admissible on incremental stock of 0.96 GtC between 2006-2030 (projected increase from 8.79 GtC in 2006 to 9.75 GtC in 2030), but also on the baseline stock of 8.79 GtC as on 2006 (Indian Institute of Science, Bangalore 2006)

## Conclusion....

Concept of "Compensated Conservation" to be a rewarding act and motivate all nations including Brazil and Indonesia for implementing conservation measures to maintain carbon stocks and thus ecosystem services Nations to be compensated for ecosystem services generated and enhanced and not for destroying same

