Cancun agreement and guidance on REDD+ Safeguards

- (a) That actions complement or are consistent with the objectives of national
- forest programmes and relevant international conventions and agreements;
- (b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
- (c) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national
- circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;
- (d) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities;
- (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits;
- (f) Actions to address the risks of reversals;
- (g) Actions to reduce displacement of emissions.

- Parties identified a range of issues, including guidance on systems for providing information on how safeguards referred to in appendix I to decision 1/CP.16 are addressed and respected ···;
- First of all, the experts agreed that safeguards are an essential aspect in the implementation of REDD-plus actions and activities.
- They emphasized that the development and implementation of such information systems must be country-driven and
- national sovereignty and national legislation respected.
- In addition, the processes relating to addressing safeguards and providing information should be transparent and
- ensure the participation of all relevant stakeholders.

FCCC/SBSTA/2011/INF.17

Conservation of forest biodiversity

- is not only about organisms but also benefit mitigation of climate change and human welfare

- For climate change mitigation, conservation of biodiversity as carbon stock and for ecosystem sustainability should be considered

- For benefits of indigenous & local people should be a focus

- should be monitored at project and national/sub-national levels

How to look at biodiversity for carbon in tropical forests

- No trade-off between biodiversity in well-conserved <u>natural forests</u> and carbon,

- <u>Biomass</u> of natural forest is correlated with forest biodiversity (but may not be linear)

- Forest <u>structure, type</u>, amount of <u>human disturbance</u> and <u>forest area/ fragmentation (connectivity)</u> are highly related with biodiversity

- In conclusion, coarse filter indicators can be used

Scientific background of an indicator

# -Forest structure (habitat heterogeneity)-

Scientific background of an indicator
−Forest types & human disturbances−

Similarity of species composition in primary forest in each forest in Amazon

organism	Secondary forest	Planted forest
Trees & lianas	30%	0%
Birds	40%	20%
Lizards	60%	40%
Large mammals	80%	50%
Orchids	90%	70%

Barlow J et al. PNAS 2007

Scientific background of an indicator −forest area/ fragmentation−

Sohdi et al 2004 TREE
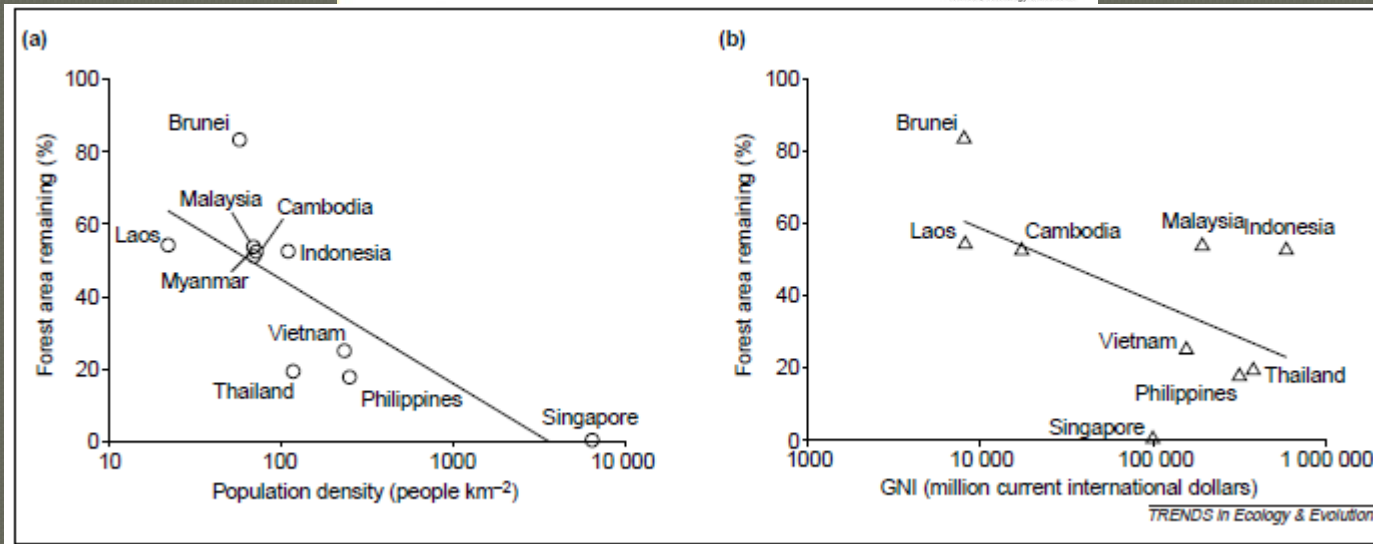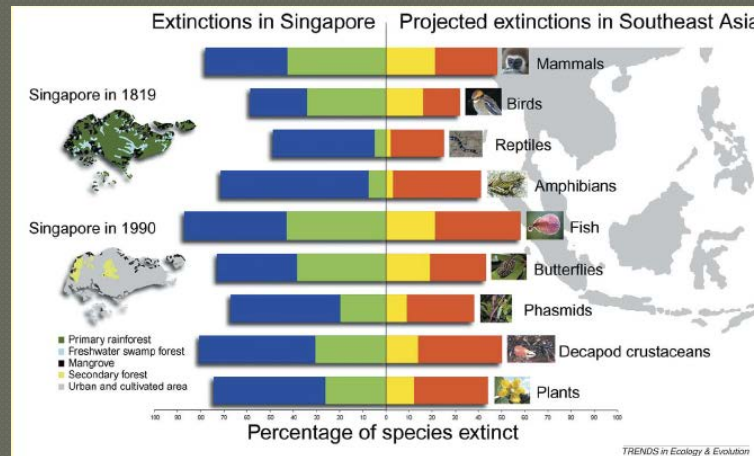
How to monitor

- Particularly at the larger scale, remote sensing is an important tool
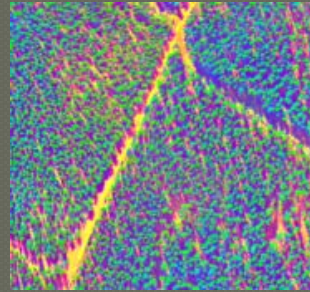
- At the species level, for example, a time-lapse camera is a good tool for some wildlife

Human benefit
-ecosystem services-

- Ecosystem services highly related with biodiversity can be monitored through biodiversity monitoring

- High value species such as for NTFP can be directly monitored

- Some ecosystem services such as water quality, protection from natural disasters, can be monitored with vegetation cover, i.e., forest area

Indicators at different scales

Indicator	Target	National level	Project level
Forest type	Biodiversity (degradation), Biodiversity related ES	Primary, naturally regenerated, planted	..plus, classification of planted (native spp, multi spp, uneven)
Forest structure	Biodiversity (species community)	Forest type	Multi-cohort structure, gaps, dead wood
Human disturbance	Species extinction, biodiversity (degradation), ES	Clearcut vs. low impact logging, agriculture vs. agro-forestry	···plus, quantified impacts
Forest area/ fragmentation	Biodiversity (degradation), ES	Area of each type & stage	···plus, non-forest ecosystems
Species	Cultural service, economic importance (eg NTFP)	distribution of endangered/ flagship/economic-ally important spp	..plus, invasive spp, locally important spp

Furthermore

- Social safeguards are related with biodiversity to some extent, for example, good governance and local community participation facilitate implementation of conservation of BD and its monitoring.

- National laws, strategies and other activity to enhance conservation of BD can be indicators, too.

Conclusions

- At the national level, coarse filter indicators and use of remote sensing are recommended.

- At the project level, species can be included for monitoring of ecosystem services (local benefits).

- For safeguard information systems, national activities to enhance conservation of BD can be included in indicators.

Thank you