PNG views on Reference Emission Levels and Reference Levels for REDD

Expert Meeting
Bonn, Germany, 23-24 March 2009

Discussion Topics

1. Defining REL & RL
2. Reference Period
3. Historical GHGs data
4. Correction Factors to address equity
5. Market Entry
6. Methods

Definitions

- The **reference emissions level** (REL) is the amount of gross *emissions* from a geographical area estimated within a reference time period (REDD)

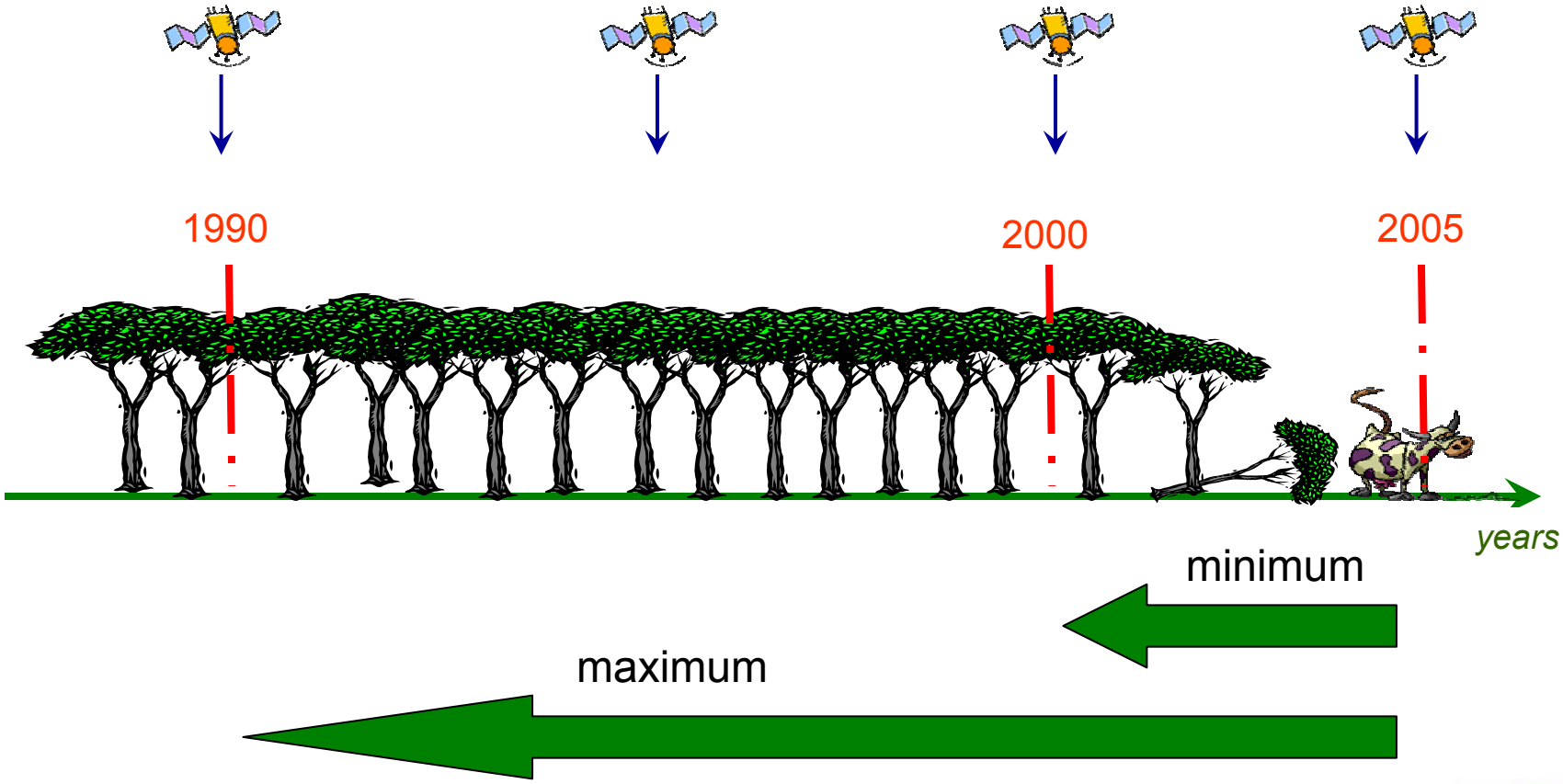
- The **reference level** (RL) is the amount of net/gross *emissions and removals* from a geographical area estimated within a reference time period (Conservation, SMF, EFCS)

Essential rules

Reference Emissions Levels and Reference Levels:

- once set cannot be changed during an implementation period
  - a fixed reference is fundamental for incentivizing actions
- are based only on historical data of land uses, GHGs emissions/removals, socio-economic variables
  - no projections and no forward looking baseline in to minimize uncertainty
  - past decade of economic growth may overestimate upcoming decade

REL & RL elements: reference period



REL & RL elements: historical GHGs data

Three possible technical approaches
that potentially support
three different REDD implementation approaches

- **Simplified**: only gross emissions from forest land converted to other land uses (Deforestation) -- Category 2

- **Complete**: gross GHGs emissions related to decreases in forest carbon stocks (Deforestation and degradation) – Category 3 / IPCC GPGS

- **Sector**: full GHGs balance from the whole Forest estate (Deforestation, forest degradation, SFM, conservation) -- Category 3

REL & RL elements: historical GHGs data

Simplified approach:

$$\sum (A_{DEF} * \Delta C)$$

Gross carbon stock change (ΔC) in areas deforested (A_{DEF}) during the reference period. In this case the carbon stock concept could be further simplified and be related only to some carbon pools (e.g. above ground biomass)

REL & RL elements: historical GHGs data

Complete approach:

$$\sum\left(A_{DEF} * \Delta C\right) + \sum\left(A_{DEG} * \Delta C\right) + (CH_4, N_2O)$$

Gross carbon stock changes (ΔC) in areas deforested (A_{DEF}) during the reference period plus net decrease of carbon stocks (ΔC) at national level in degraded forest land (A_{DEG}) and non-CO_2 gases emissions during the same period

REL & RL elements: historical GHGs data

Sector approach:

$$\sum \left(A_{FL} * \Delta C \right) + \left(CH_4, N_2O \right)$$

Sum of all carbon stock changes (ΔC) occurring in forest land (A_{FL}) during the reference period, due to:
- Conservation/SFM of Forest land (forest land remaining forest land)
- Forest land conversion to other land uses (DEF)
- Land Conversion to forest land (A/R) plus non-CO_2 gases emissions during the same period

REL & RL elements: correction factor

Development Correction Factor

- Should take into consideration socio-economic variables (and land availability) which have determined historical net emissions.
- Need to address different national circumstances (i.e. HFLC)
- Must also account for differences in ‘Respective Capabilities’
- As a result, REL & RL may be either lower or higher than otherwise

REL & RL elements: correction factor

Socio-economic variables:

The variables that influence/determine the level of deforestation and forest degradation could be subdivided into two main categories:

- internal variables (generated within the national borders)
  - (e.g. human population with its consumption of forest and agrarian goods is the main internal variable; the higher population density, the higher potential pressure on land. However, the distribution of population among urban and rural areas does matter)

- external variables (generated out of the national borders)
  - (e.g. The external pressures on land deriving from the international demand of forest and agrarian goods. International higher level of prices, compared with the internal one, put additional pressure on national land.

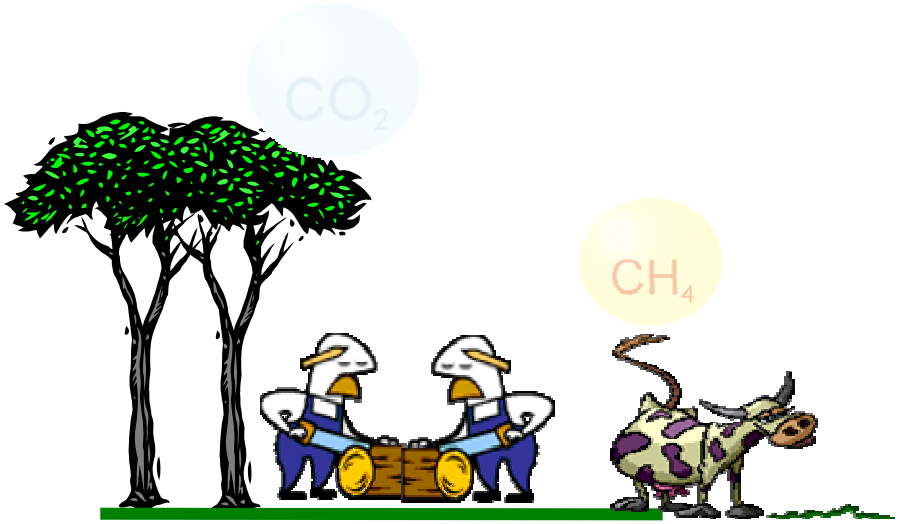
REL & RL elements: correction factor

For instance, during the reference period, countries with lower emissions (low deforestation rate) and high forest cover, could be allowed to increase REL & RL since pressure on forest land may increase due to social need for economic growth.

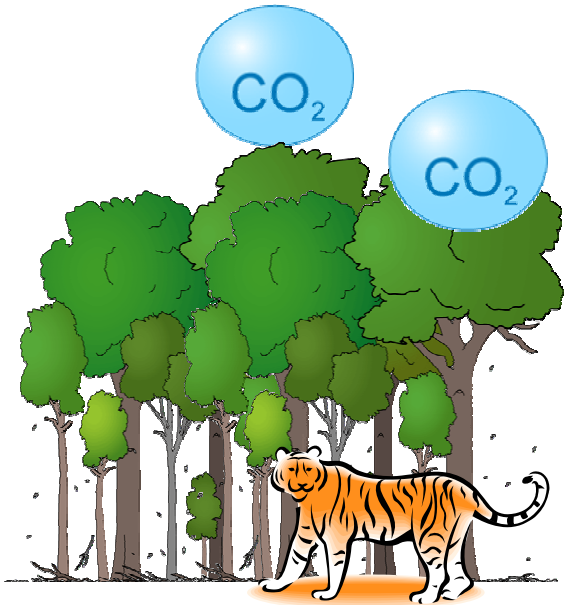
<u>A correct selection of variables for the Correction Factor calculation may assign such countries a value higher than 1</u>

(this is a mirror of what has been done for target assignment under the Kyoto Protocol)

Lower than 1



Higher than 1

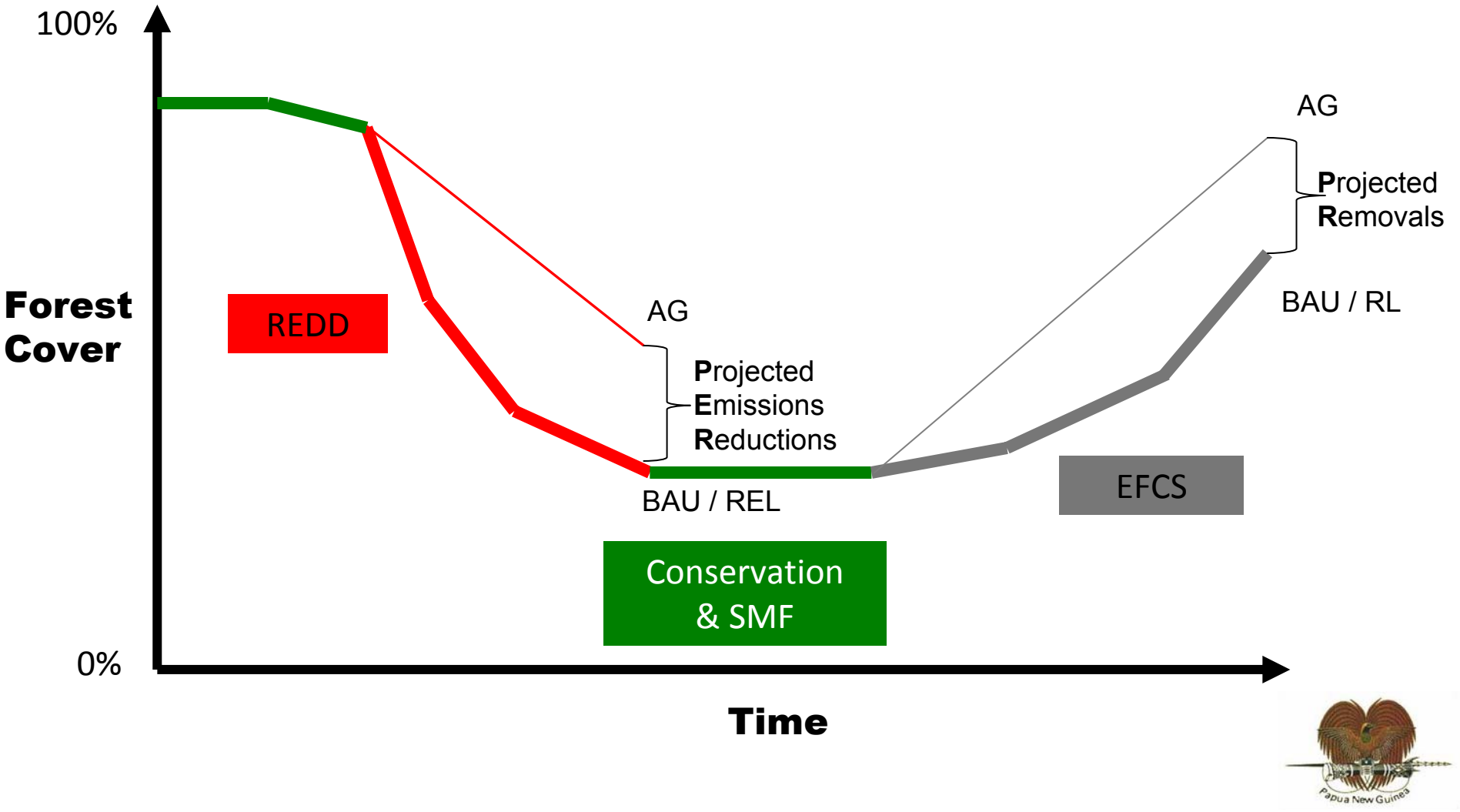


REL & RL elements: correction factor

Respective Capabilities

- Must account for fundamental principle in the UNFCCC – *common but differentiated responsibilities and* ***respective capabilities***
- CDM has demonstrated that respective capabilities can distort mechanisms and compromise equity
- Historical data demonstrates that, generally, as incomes rises and economies diversify, forest loss slows, may stops and can reverse.
- As a result, developing countries with high 'respective capabilities' should not expect global community to underwrite 100% of their emissions reductions or removals.

Performance Incentives



Market Entry

Developing Country would notify Parties and Contact Group formed to consider the following:

1. Presentation of Business As Usual

2. Projected Emissions Reductions/Removals under Aspirational Goal

3. Development Correction Factor (up or down)

4. Credit for Early Action

5. Reference Emissions Level / Reference Level

Methodologies

- IPCC already provided all needed methodologies for measuring and reporting GHGs emissions and removals in a scientifically sound manner;

- IPCC methodologies have been built in order to be applied under many potential national circumstances;

- Simplified default approaches can be further developed for initial stages of REDD

- Conservativeness principle will ensure the widest access to the REDD mechanism together with the smallest risk of overestimating benefits

"sampling vs. wall-to-wall"
these questions are already correctly addressed by the IPCC Guidance or the GOFC-Gold REDD Sourcebook

Closing Odds & Ends

. REDD Countries should have more flexibility to propose REL & RL than Annex-1 (quite flexible, indeed). Contact Group format. If applying historical data, REL & RL = BAU.

. Projections and Extrapolations will further erode credibility of forest sector as mitigation and adaptation tool. Depending on drivers, recent history itself may be over-estimation (global economies).

. Global Leakage is REDD-herring. Impossible to legally prove causality. Not required of Annex-1. Not required of other sectors. Broad participation is key – threshold?

. Development Correction Factor: Respective Capabilities must be addressed if broad participation is to be achieved.

. Market Entry Regulator: AAU cutout to protect against flooding and or lack of demand – reciprocal performance.