DEFORESTATION:
FROM LOCAL TO BROAD CHALLENGES AND POSSIBLE RESPONSE

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Deforestation in historical background

1997 – Deforestation is among direct human-induced activities identified by Kyoto Protocol (Article 3.3).

2000 – Annual release of CO_2 is about 16% of global emissions from fossil fuel combustion and cement production (IPCC LULUCF SR)

2001 – Definition of deforestation as *direct human-induced conversion of forested land to non-forested land* (COP 7)

2005 – Special Agenda Item for further consideration at SBSTA (COP-11/MOP1)

EVIDENCE OF GLOBAL CONCERN ABOUT DEFORESTATION AND EXPLORING POSSIBLE OPTIONS TO REDUCE IT

Deforestation in national context

Based on management practices, deforestation is defined as conversion of forest lands to:

➢ Permanently un-stocked lands; and

➢ Other land categories (implies transfer of authority rights).

   National interpretation is consistent with COP-7 definition.

Deforestation of managed forest lands mainly occurs due to

   on-going human activities (mining, construction etc.)

Deforestation is linked to other economy sectors

Deforestation in national context

Contribution to national emission trends

➢ Mean annual deforestation within Russian Federation is about 7.6 Kha (<0.1% of the national area of managed forest lands);

➢ Methodological issues for monitoring changes in area and carbon stocks:

   • Differentiation between wood harvest and deforestation;

   • Tools for identification and assessment;

   • Cost-efficiency considerations; and

   • Possible response.

Deforestation in national context: methodological issues and challenges

Differentiation between wood harvest and deforestation depends on treatment of un-stocked forest lands in relation to:

- Timely regeneration of temporarily un-stocked forest lands in accordance with national forest regulation; and
- Changes in land use category.

Tools for identification, monitoring and assessment:

- Remote sensing;
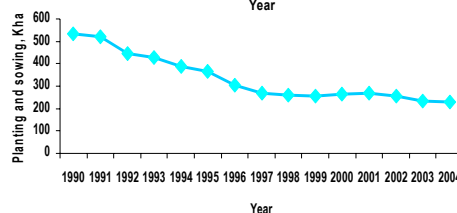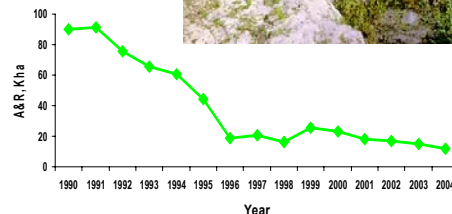- Ground surveys; and
- Record-keeping;

Challenges for assessment and monitoring:

- Inclusion of new parameters in national statistics;
- Fate of harvested wood for net-net accounting; and
- Cost-efficiency in case of minor contribution to total national emissions.

Deforestation in national context: Possible response

- Deforestation is a cross-sectoral issue;
- National policies and measures:
  - ✓ Reallocate efforts to increase carbon stocks
  - ✓ Improve technologies in other sectors and management practices;
  - ✓ New challenges as additional incentives
- Project activities
  - ✓ Additionality – sectoral and regional issues;
  - ✓ Leakage – environmental integrity;
  - ✓ Permanence – long-term and sustainable operation;
  - ✓ Co-benefits – improvement of livelihood of local community.

Broad challenges

Similarities in the international context:
- ➢ Deforestation occurs in all countries, but in different extent;
- ➢ It is a cross-sectoral issue linked to national development targets;
- ➢ Mitigation measures and options may not work, if inconsistent with national priorities;
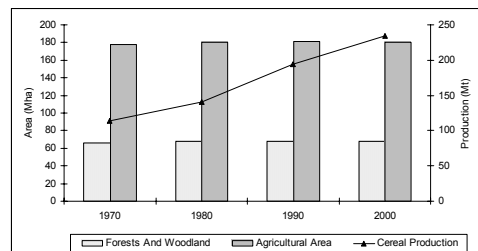- ➢ There are strong links to adaptation options.

Challenges:
- ➢ Geographical position (climate, altitude, fertility);
- ➢ Ecosystem vulnerability (restoration capacity);
- ➢ National circumstances (industry/development priorities);
- ➢ Management practices (intensive/extensive); and
- ➢ Final land-use category (agriculture/urban/industrial).
- ➢ Financial/market incentives.

How to avoid/reduce deforestation rates?

Response

Measures and options on the national level (*development priorities*):

- ● Adaptation to climate impacts
  - ➢ **Technology improvement**
    - ✓ *Traditional (advanced management, technology transfer);*
    - ✓ *Alternative (wind/ solar/nuclear).*
  - ➢ **Reallocate efforts in related sectors**
- ● Mitigation options in line with national priorities (*biodiversity conservation/ ecotourism*)

Example of national policy to reduce deforestation in India (Courtesy of Prof. N.H. Ravindranath)

Project level activities (*driven by economy/market incentives*)

Additionality (alternative approaches)

Leakage (environmental integrity, community needs, cultural heritage; methodological challenges; capacity building)

Permanence (on-going activity)

First step: *building common understanding on needs and priorities on "reducing emissions from deforestation"*