

# Forests and Climate Change:

## Mitigation and Adaptation through Sustainable Forest Management

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## Forests: An array of benefits



FAO/Forestry/CF/000118

- More than 1 billion people live in or around forests and use forest resources for:
  - Food
  - Timber
  - Fuel
  - Medicine
  - Income
  - Clean Water
  - Building material
  - Spirituality
  - Recreation
- 70 million Indigenous Peoples living in remote areas depend completely on forest resources for their livelihoods



## The Problem: Deforestation



- Forests take in and store C through trees, soil and water but also emit C through respiration and natural decomposition
- Globally: contain 1.2 trillion tonnes of C, over 50% of all terrestrial vegetation and soils
- Tropical deforestation releases about 20% of total human-generated CO<sub>2</sub> emissions



## Causes of Deforestation



- Latin America: large scale agriculture and unsustainable harvesting of timber
- Africa: subsistence agriculture and local fuel-wood consumption
- N. America and Russia: unsustainable harvesting of timber
- Asia: combination of all of the above



## Non-Legally Binding Instrument on All Types of Forests



### *Global Objective on Forest 1:*

Reverse the loss of forest cover worldwide through sustainable forest management, including protection, restoration, afforestation and reforestation, and increase efforts to prevent forest degradation;



## Non-Legally Binding Instrument on All Types of Forests



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- Forest Law Enforcement and Governance
- International Trade in Forest Products
- Protection of Forests
- Science and Research
- Public Awareness and Education
- Private Sector and Industry
- Indigenous and Local Communities
- Monitoring, Assessment and Reporting



## SFM and Mitigation

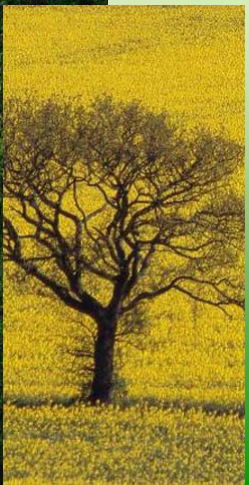


### **Possible Actions:**

- managing forests with high carbon uptake potential
- expanding such forests through reforestation and afforestation,
- reducing deforestation,
- providing an enabling environment for investments and market access to sustainable forest-based products, and
- increasing the use of forest-based products such as bio-energy and durable wood products, and substituting these for less eco-efficient materials



## SFM and Adaptation



- Forests Vulnerable to changes in temperature: fire, disease, pests
- Can be part of national adaptation strategy:
  - Protect soil against floods and deflation
  - Rehabilitate degraded land
  - Maintain water quality



## Policy Tools to promote SFM



- International and National Financial Incentives
- Regulations

### *Obstacles:*

- *lack of capital,*
- *inadequate monitoring and*
- *law enforcement capacity*



## Some Conclusions



- Forests have tremendous potential to mitigate climate change and support national adaptation efforts
- Forests protect both the environment and people
- Sustainable forest management provides the basis for action



Thank You



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