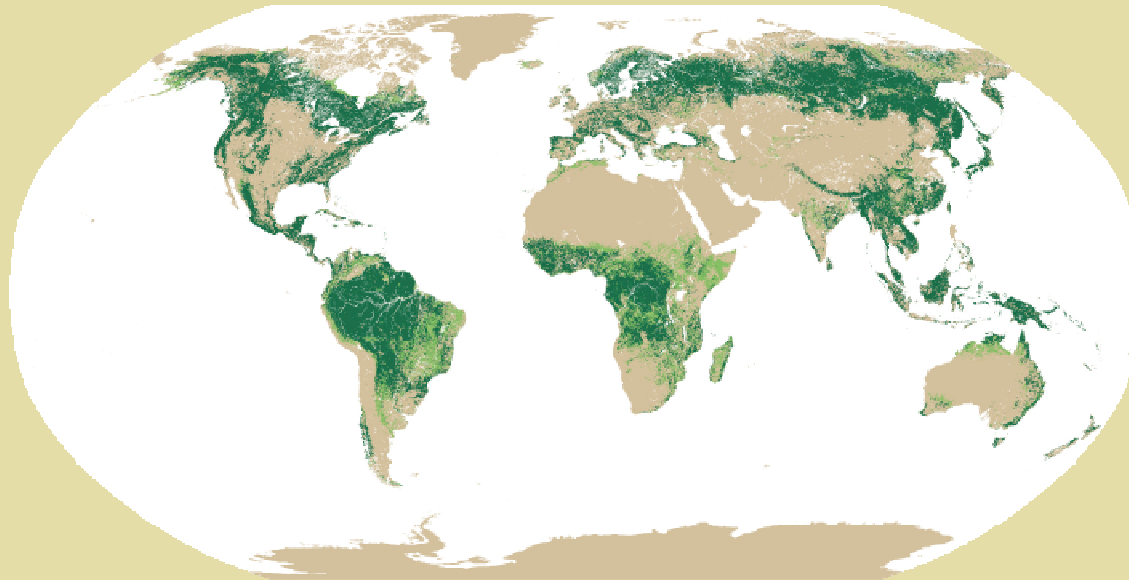


# **Climate Change and Forests**

- The role of forests and forest sector



European Economic and Social Committee  
Facing the challenge – change in forests and the forestry sector  
23 September 2009 Joensuu, North Karelia, Finland

**Jan Heino**  
**Assistant Director General**  
**Forestry, FAO**



# RESOURCES:

FOOD

FODDER





# RESOURCES:

TIMBER



FUELWOOD





## Food Safety Factors of Forests

Direct food production:	Game, fruit, cattle feed, pharmaceuticals, agro-forestry etc.
Stability of food production:	Ecosystem services such as water, diversity, flooding and erosion protection, etc.
Generation of income:	Sale of timber and non-wood products (game, berries, etc.)
Cooking and households:	Fuel and other energy to households







## SERVICES:

CONSERVE BIODIVERSITY

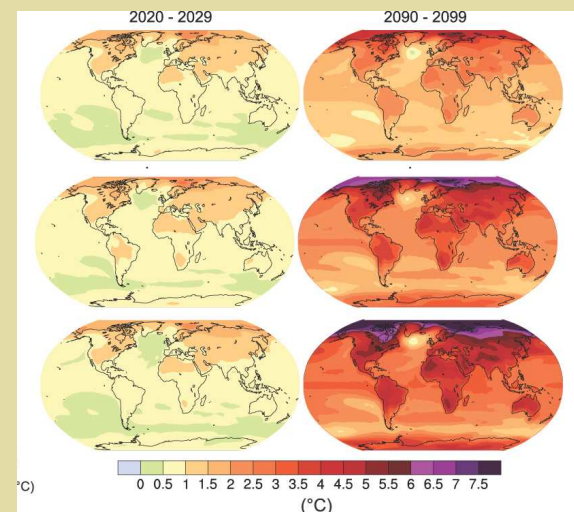
MITIGATE CLIMATE CHANGE



# Climate change impacts

## Climate change and climate variability

- rising temperatures
- changes in precipitation
- changes in water availability
- sea level rise
- increase in extreme events (storms)



# Climate change impacts

## Impacts on forests and forest-dependent people

- shifts in species' ranges
- increased risk of pests, diseases and wildfires
- risks to already vulnerable ecosystems
- changes in forest productivity & ecosystem services → impacts on livelihoods

## Indirect impacts

- human population shifts
- increased land pressure





# Forestry adaptation

## Forest management interventions

- improve resilience through “best practices”
- adapt management plans and practices
- in-situ and ex-situ genetic conservation

## Measures to decrease vulnerabilities of forest-dependent people

- reinforce coping strategies
- diversification of rural incomes
- “rights based approach” to mitigation and adaptation measures
- strengthen institutional frameworks







# Forestry mitigation

## Forests has a key role to play

“... in the mitigation of climate change by acting as carbon sinks. Forestry can make a very significant contribution to a low-cost global mitigation portfolio ...”  
(Stern Review 2006)

“ In the long-term, sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual yield of timber, fibre, or energy from the forest, will generate the largest sustained mitigation benefit” (IPCC –2007)





# Forestry mitigation options

## Maintain or increase forest land area

- reduce deforestation
- increase afforestation and reforestation

## Maintain or increase forest carbon density

- reduced forest degradation
- forest management interventions; RIL, etc.
- forest restoration
- wild fire management

## Increase use of wood products

- increased carbon stocks
- fossil fuel substitution





# Forestry mitigation

## Mitigation in Europe

- focus on continued sustainable forest management (SFM)
  - promote use of Harvested Wood Products as carbon storage
  - biomass and second generation biofuels
  - take adaptation measures to avoid fire and insects
  - production process: increase efficiency
- 
- make sure that the Forest sector and based industries are well placed in the EU's move towards a low carbon economy







# Forestry mitigation

## Opportunities

- additional value for forests & trees
- forest and wood processing residues
- additional income for smallholders
- rural development





# Forestry mitigation and adaptation

## Europe's support is needed

- support for developing countries on:
  - capacity building on SFM
  - development of national forest programmes (nfp)
  - reforestation projects
- support the REDD instrument (REDD= reduced deforestation and forest degradation in developing countries)
- for technology transfer
- work to reduce illegal logging in the tropics





# Forestry mitigation and adaptation

## International developments

### Mitigation

- reduced emissions through REDD
- land-based or activities-based accounting
- accounting methods for forest management
- treatment of harvested wood products in accounting

### Adaptation

- financial support and transfer of adaptation technologies to developing countries, including forestry adaptation





# Working in partnerships

## Collaborative Partnership on Forests:



## Strategy Framework for Forests and Climate Change

- CPF prepared document
- responding to the need of concerted action
- the base for a coordinated response based on SFM



# Working in partnerships

## UN-REDD

- a collaborative program between UNEP, UNDP and FAO
- objectives:
  - support developing countries to prepare for REDD
  - facilitate international cooperation on REDD
  - develop standards, methods and guidelines
  - demonstration activities
- 9 pilot country programmes
- collaborate closely with other REDD initiatives, e.g. WB's FCPF





## **Key points**

- **SFM is essential to efficient climate change mitigation and adaptation**
- **discussions under the negotiations in UNFCCC can provide increased incentives for SFM in Europe**
- **Europe has a large role to play in forest based adaptation and mitigation both at home and in developing countries**





*Thank you!*  
*Kiitoksia!*

