



**PROCUREMENT OF BIOMASS FOR ENERGY IN MOUNTAIN FORESTS**

WOLFGANG SCHOPFHAUSER at COP-9, Bonn, 27 May 2008

# INTRODUCTION

- **Need for a holistic approach in safeguarding forest biodiversity**
- **Forest measures need to be multifunctional in order to make them sustainable & durable**
- **Starting point is the need for**
  - **demand for increased renewable energy generation**
  - **securing sustainability & biodiversity of forests**
  - **coping with climate change impacts**



## OBJECTIVE FOR THE BIOMASS PROCUREMENT IN MOUNTAIN FORESTS (1)

- **Timber harvesting in mountain forests leave large quantities of harvesting residues concentrated near forest roads**
- **Residues serve as important source of nutrients particularly on degraded soil.**
- **However, concentrated residues promote spreading of pests (bark beetles, root) and can impact the forest climate negatively**



## OBJECTIVE FOR THE BIOMASS PROCUREMENT IN MOUNTAIN FORESTS (2)

- Therefore, biomass procurement has to follow immediately timber harvesting
- By extracting the timber fraction from residues the habitat for pest development is reduced
- Biomass production supports forest owner and entrepreneur income that allow improving ecosystem management



# GUIDELINE FOR THE BIOMASS PROCUREMENT IN MOUNTAIN FORESTS

- **Multifunctionality: Optimising the procurement of biomass for energy with respect to**
  - forest ecosystem impact
  - biotic pest development
  - energy input for the procurement process
  - maximizing energy output
- **For mountain forests soil restoration criteria apply that**
  - Safeguard low impact operations
  - Avoid forest soil degradation
  - Stop spreading of pests
  - Prevent biodiversity loss



## **No biomass harvest on:**

- > Strongly degraded stands & soils
- > Forests where litter gathering took place
- > Low base containing parent rock
- > Forests standing on silicate gravel/metal

## IMPLEMENTING BIOMASS PROCUREMENT IN MOUNTAIN FORESTS

- **Responsibility is with all actors along the forest chain:**
  - Forest owners
  - Forest management staff
  - Forest entrepreneurs
  - Timber purchasers
- **As user of the biomass and bioenergy producer the industry is committed to**
  - Forest soil protection
  - Biodiversity protection
  - Efficient raw material use
  - Emission reduction



**Thank you for your attention!**

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