



# PROTECTIVE FORESTS IN TURKEY

MINISTRY OF AGRICULTURE AND FOREST

GENERAL DIRECTORATE OF FORESTRY

DEPARTMENT OF SOIL CONSERVATION AND WATERSHED REHABILITATION



# FUNCTIONS OF PROTECTIVE FORESTS

55 Protective Forests

Total Area 251.520 ha (%1.15)

- ▶ PRESERVING OF AIR QUALITY IN RESIDENTIAL DISTRICT
- ▶ COMBAT AGAINST TO SAND AND DUST STORMS
- ▶ CONSERVATION OF RAILWAYS AND HIGHWAYS
- ▶ PROTECTION OF RIVERBEDS AND FORESTS



## 2 AGENCIES

### GENERAL DIRECTORATE OF FORESTRY

- ▶ Implementation of Projects
- ▶ Management and Planning

### GENERAL DIRECTORATE OF NATURE CONSERVATION AND NATIONAL PARKS

- ▶ Recreational Activities
- ▶ Hunting Activities



# BENEFICIAL FUNCTIONS

- ▶ Soil Conservation
- ▶ Ecosystem Services
- ▶ Recreational Activities
- ▶ Production (Thinning)
- ▶ Promoting Human Health



# 6831 FOREST LAW

## REGULATION OF MANAGEMENT AND SEPERATION OF PROTECTIVE FORESTS

- ▶ Accepted in 1984
- ▶ Includes;
  - ▶ Management of Protective Forests
  - ▶ Implementation of Management Plans
  - ▶ Construction of Roads, Facilities, and Buildings
  - ▶ Regulation of Recreation and Hunting
  - ▶ Grazing and Mowing
  - ▶ Permitting on What Type of Mine Search
  - ▶ Penalties for Crimes Committed in Protective Forests



# Separated into 2 Categories

## ▶ Permanent Separation

- ▶ Places that have possibility of a disaster caused by Avalanche, Landslide or Erosion
- ▶ Favorable influence on environmental health in residential districts
- ▶ Protection of Railways and Highways from sand and dust storms
- ▶ Preventing Dams, Lakes and Riverbeds to be filled
- ▶ Forests that are important for national defense
- ▶ Must have at least one of above

## ▶ Temporary Separation

- ▶ To be degraded in any condition
- ▶ Damaged by Wildfire must be existed
- ▶ Forest be planned to be used in order to meet production needs



# Common Tree Species

- ▶ Quercus sp.,
- ▶ Scotch pine (*pinus sylvestris*),
- ▶ Black pine (*pinus nigra*),
- ▶ Oriental beech (*fagus orientalis*),
- ▶ Turkish red pine (*pinus brutia*),
- ▶ Taurus cedar (*cedrus libani*),
- ▶ Cilician fir (*abies cilicica*),
- ▶ Black alder (*alnus glutinosa*),
- ▶ Hornbeam (*carpinus orientalis*)
- ▶ Oriental spruce (*picea orientalis*).



# Adv and Disadv of Species (Example)

- ▶ Turkish red pine
  - ▶ Light demanding tree species
  - ▶ Fast Growing sp. and reduces biodiversity
  - ▶ Pine needles covers soil and contributes soil conservation
- ▶ Beech dominated forests
  - ▶ rich capacity of organic material
  - ▶ So that an increase on infiltration capacity of the soil
- ▶ Black pine's needles
  - ▶ reduces evaporation from soil
  - ▶ increases water harvest





# Pressure on Protective Forests

- ▶ Wildfire
- ▶ Snow harms
- ▶ Insects
- ▶ Human pressure





# CLIMATE CHANGE

- ▶ (-)Change on Precipitation Regime
- ▶ (-)Increase on Soil Loss (increase of sediment)
- ▶ (-)Decrease on Vegetation
- ▶ (+)Increase on Vegetation

# OGM ACTIVITIES

- ▶ Plantation
- ▶ Soil Conservation
- ▶ Enhancement Activities for Forest Flora

