



## Reasons of Erosion

There is erosion on 59% of the agricultural area, 54% of the forestland and 64% of the rangeland in Turkey.



While the amount of soil moved was 500 million ton/year, it was decreased to approximately 220 million ton/year as a result of erosion control, afforestation activities, improvement of degraded forest areas, improvement of rangelands, developments in irrigation techniques in agricultural areas and evaluation of sediment data measured in rivers.



*Forest for people, forest for future*



REPUBLIC OF TURKEY  
MINISTRY OF ENVIRONMENT AND FORESTRY  
GENERAL DIRECTORATE OF AFFORESTATION AND EROSION CONTROL



## State of Forests in Turkey

Turkey has rich biological diversity value for plant types other than forest trees, non-wood forest products and fauna resources. The forest area in Turkey has been increased by 1,3 million hectares with the activities performed in the last 37 years.

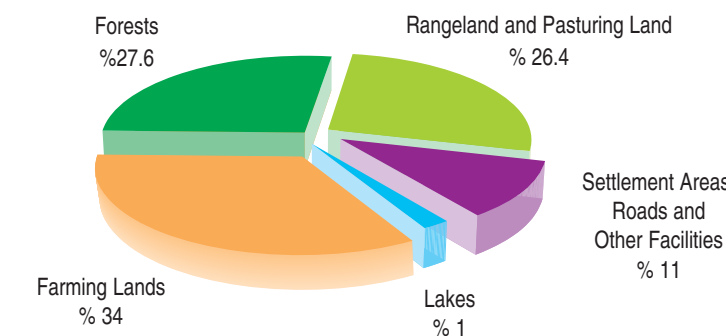
The degradation in the ecosystem subject the humanity to many problems such as aridity, poverty, drought, erosion, flood, spate, air pollution, etc. The geographical location, climate, topography and soil conditions of Turkey increase the vulnerability of our country to land/soil degradation and drought. When we analyze the reasons of erosion for Turkey, human factor comes to forward. The geographical location, topographic structure and climate conditions of our country have effect on the increase of erosion and make it harder to struggle with erosion.



## EROSION CONTROL ACTIVITIES IN TURKEY

Forests cover an area of 21.5 million ha. in Turkey (27.6 % of country's land surface). 99.9 % of country's forests are owned by the state. Thereabout half of the forests consists of coniferous species and the other half consists of broad-leaved species. Besides possessing circa 9000 plant species, including 3000 endemic species, and rich fauna resources; Turkey is among the temperate zone countries which are rich in terms of biological diversity. In Turkey; the distribution of forest ecosystems is as follows; rainforests and temperate zone in the north, Mediterranean forest ecosystems in the west and south regions, arid-semiarid forest ecosystems having mainly oak species in the East-Southeast regions, and transition zone forest ecosystems in the coastal and inner regions. Turkey's forests have rich biological diversity values in terms of plant species other than forest trees, non-wood forest products and fauna resources.

### Lands Distribution in Turkey





## Works Performed

As a result of the activities performed, OECD General Secretary Angel GURRIA states that "Turkey is the world leader for combating the erosion".



## Methods Used in Erosion Control Activities

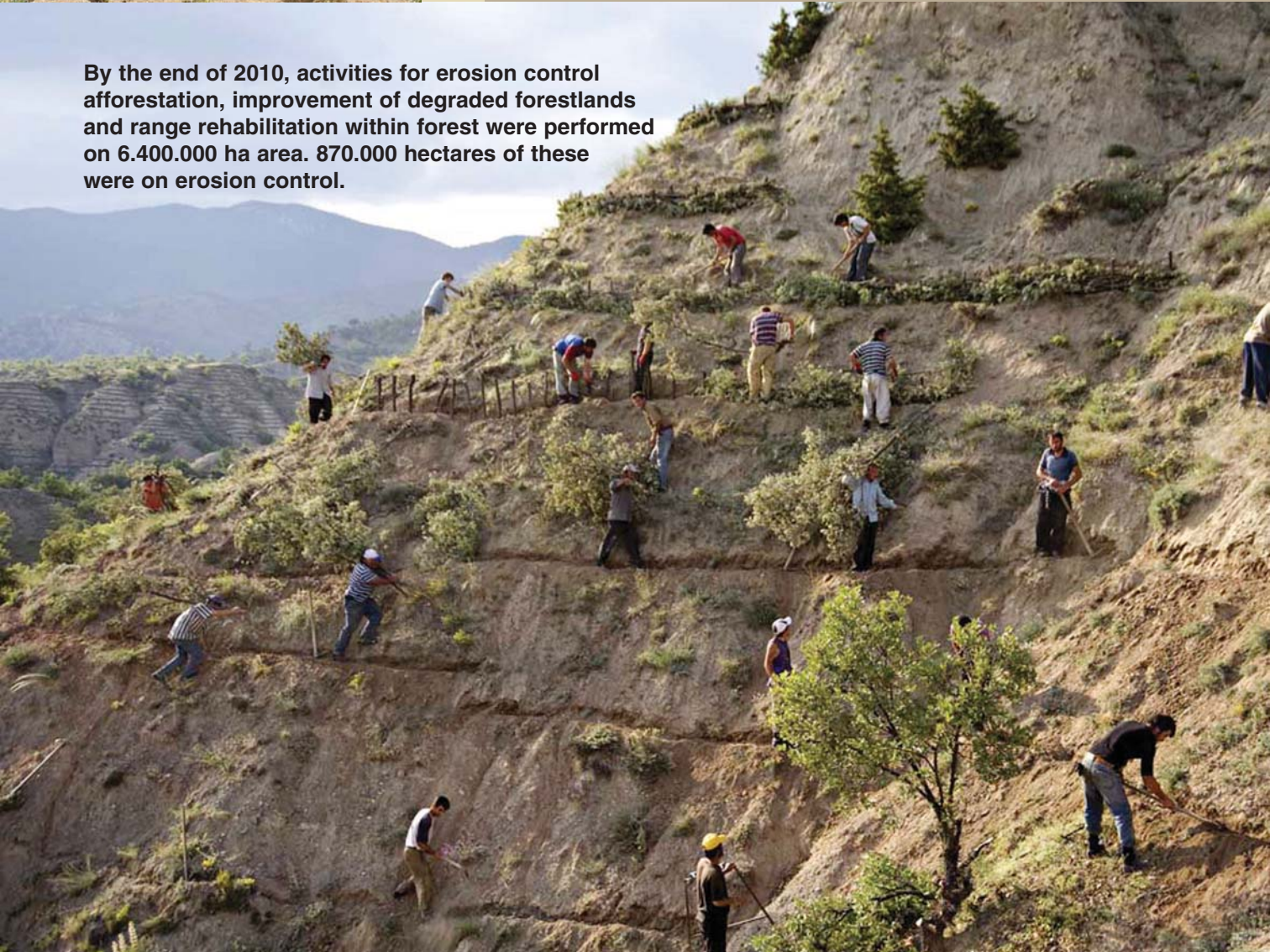


By the effects of the climate change experienced recently, there was an increase in flood events in Turkey. In order to keep the rainwater falling on flood watersheds from flowing, the need to build larger terraces appeared to store the rain.



According to interval length calculated as per the maximum precipitation on arid and semi-arid areas in Turkey, mini excavators are used in grading type terrace with 150 cm width.

By the end of 2010, activities for erosion control afforestation, improvement of degraded forestlands and range rehabilitation within forest were performed on 6.400.000 ha area. 870.000 hectares of these were on erosion control.



Administrative measures to prevent human intervention and cultural measures such as forestation and vegetation activities to prevent the surface erosion are taken.

Along with these, in the erosion control activities;

- Terracing activities to prevent the surface erosion,
- The facilities such as dry wall, live threshold and wire net are used to prevent gully erosion.

