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# Soil and water Conservation Engineering

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## Why Soil and Water Conservation?

- Soil and water are two important natural resources and the basic needs for agricultural production.
- Total geographical area of India is **329** million ha and annual average rainfall is about **1190**mm.
- **Soil** defined as the source of life for plants as well as other living creatures.





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# WHY WE CARE FOR SOIL????

## Soil functions

Soils deliver ecosystem services that enable life on Earth



2015  
International Year of Soils  
Soil.org/soils2015



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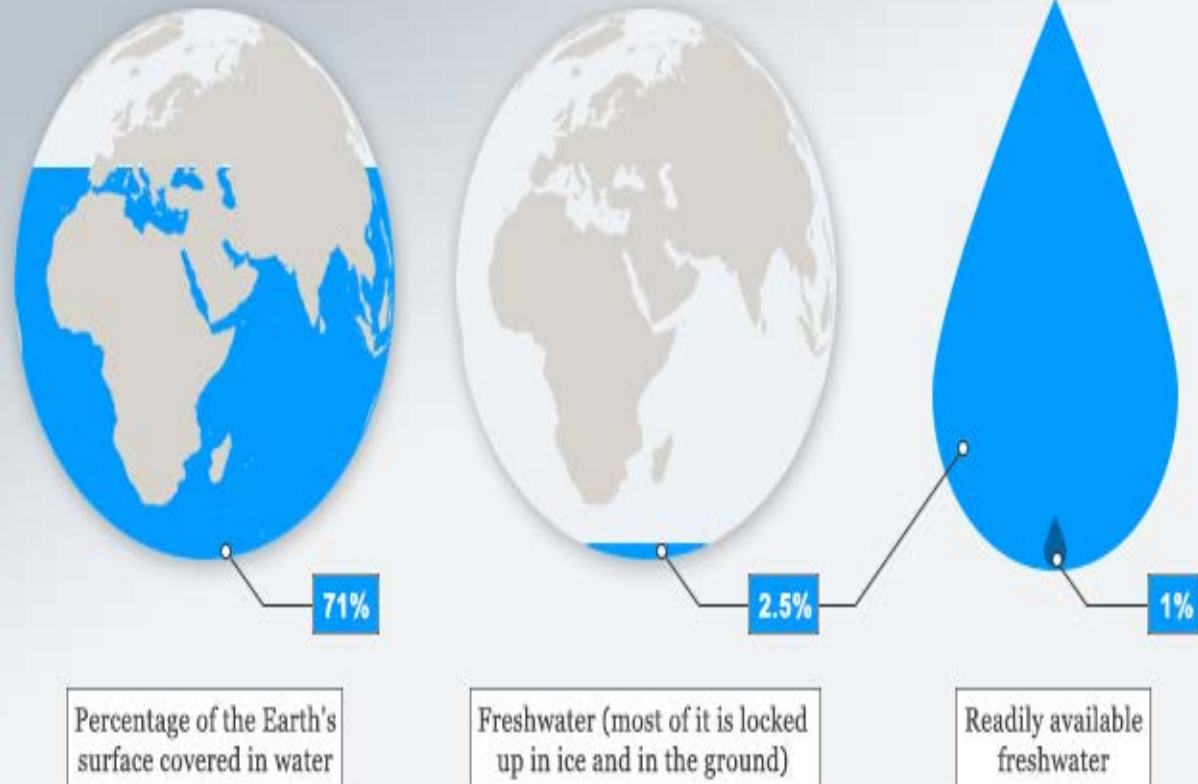


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**Water** is the only resource of earth which drives the world.

Freshwater makes up a very small fraction of the Earth's water



Source: USGS

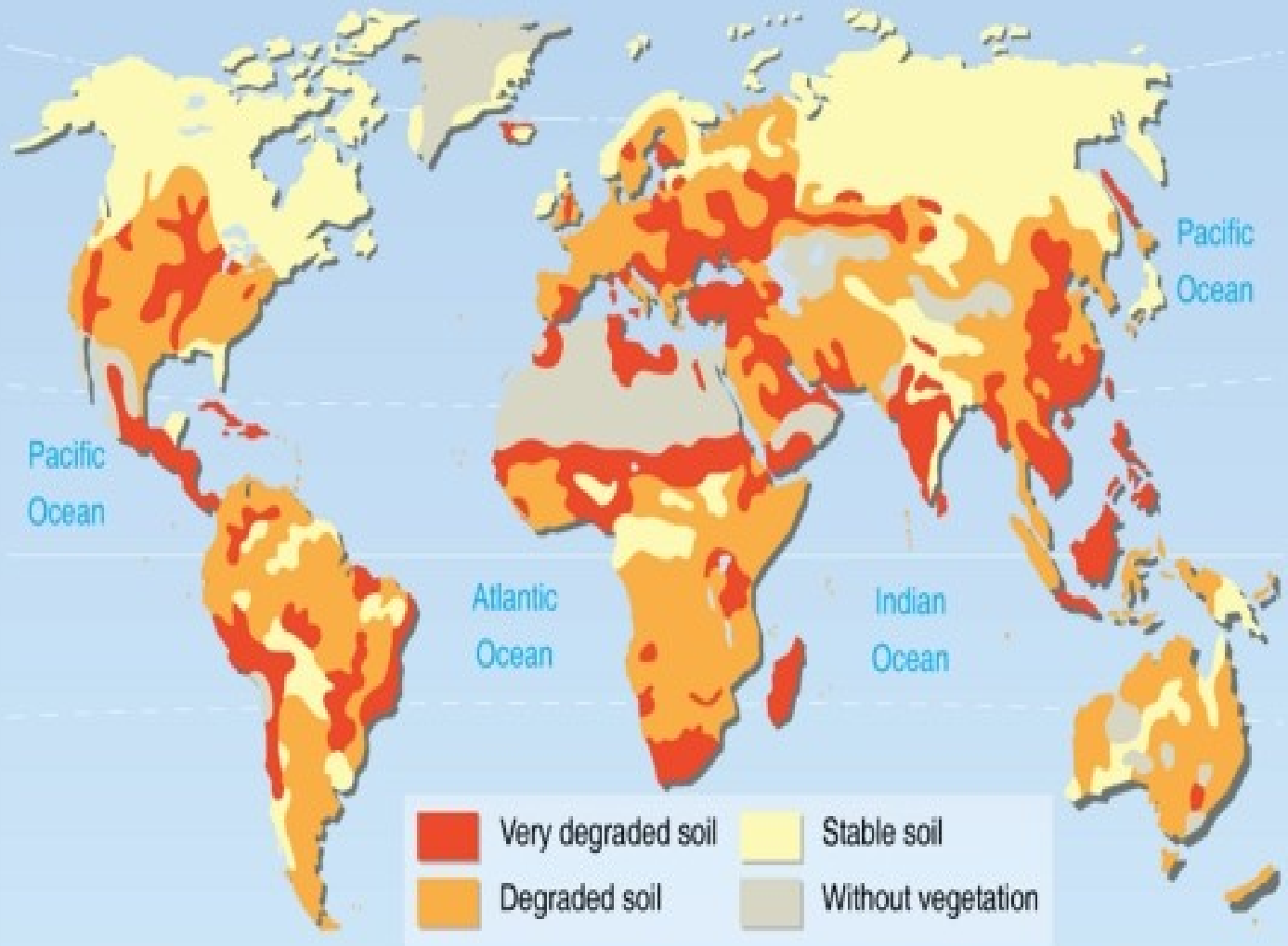
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## Soil degradation



Source: UNEP, International Soil Reference and Information Centre (ISRIC), World Atlas of Desertification, 1997.

Philippe Rekacewicz, UNEP/GRID-Arendal

**Global soil degradation map**

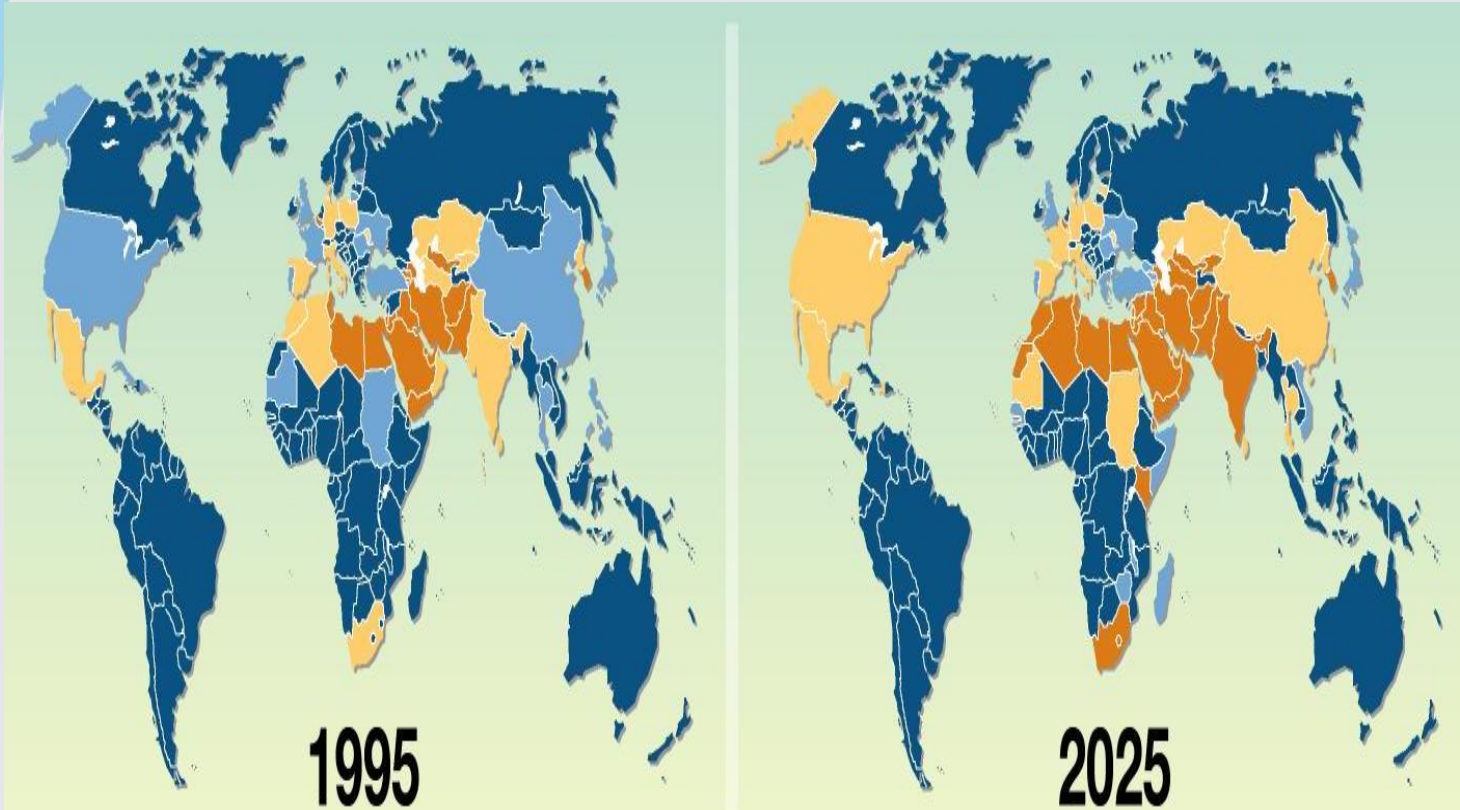


# IS WATER SUFFICIENT FOR OUR GENERATION??

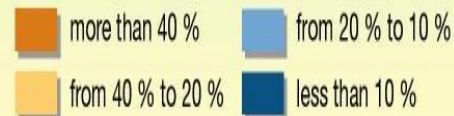


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Water withdrawal as a percentage of total available water





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**Water conservation** is the use and management of water for the good of all users in a systematic way.

**Soil conservation** is defined as the control of soil erosion in order to maintain agricultural productivity.

Conservation is not just the responsibility of soil and plant scientists, hydrologists, wildlife managers, landowners, and the forest or mine owner alone.

All citizens should be made aware about the importance of natural resources as our lives depend on that and everyone should be involved in the process of caring of these resources properly and using them intelligently.



A photograph of a dry, cracked landscape under a clear blue sky. In the center, there is a small, irregular pool of blue water. The ground is brown and cracked into many small, irregular shapes. In the background, there are some dry bushes and a few trees on a slight rise.

# SOIL - WATER CONSERVATION

**THANK YOU**