

The role of forests, in climate change & REDD+ (cont)

REDD+ is mechanism to reduce green house gas emission and mitigate the impacts of climate change by reducing deforestation & forest degradation and enhancing conservation and sustainable management of forests



Felling of trees for infrastructure development and forest fires are some of the causes of deforestation & forest degradation in Bhutan

Farm roads



The role of forests, in climate change & REDD+ (cont)

Forests can be managed and used sustainably through appropriate harvesting techniques and by reforesting the harvested areas. Reforestation and enrichment planting could also be taken up on bare and degraded areas



Plantation in a Forest Management Unit (FMU)



Forest nursery for plantation in Khaling Kharunpla FMU



Climate change, REDD+ and Forests



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What is climate change?

The daily change of atmospheric conditions is weather, and average weather conditions over a long period of time is called climate. Climate change is the observed change in long-term weather patterns and conditions.

What causes climate change?

Climate change is caused by increase of greenhouse gases in the atmosphere. CO₂ is one of the most common greenhouse gases. The greenhouse gases cause global warming and they are produced by activities such as burning fossil fuels, deforestation, factories, industries, refrigerators which release GHGs to the atmosphere. Even agriculture farming particularly paddy cultivation and farmyards produce GHGs. Other activities like forest fires also make forest a source of emission.



What are the effects of climate change?

Impacts of climate change can be in various forms, some of which can be seen in the pictures below.



Glacial lake Flooding in Punakha



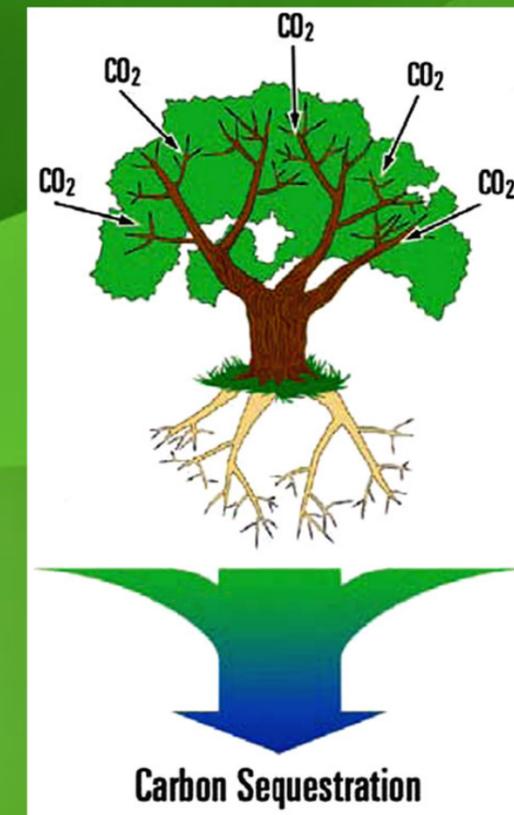
Drought affected field



Pest Outbreak: Army worms in Trongsa

The role of forests in climate change & REDD+

Forests act as carbon sinks and help in mitigating impacts of climate change. Eighty percent of the Earth's above-ground terrestrial carbon and forty percent of below-ground terrestrial carbon is in forests.



Besides being carbon sink, forest is also important for biodiversity conservation and sustaining the livelihood of communities within a landscape.