

FACULTY OF ENGINEERING AND TECHNOLOGY

Lecture-5

Forest Resources- Part 2

Dr. Swati Sachdev,
Assistant Professor,
Dept. of Applied Sciences and Humanities

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Timber extraction-effects on forest and tribal people

Wood that is used for building houses, furniture, etc. are called **timber**.

Increased industrial demand for timber has intensified unscientific clearing of forests leading to deforestation and fragmentation that has severely affected forest and tribal population.



Source: http://www.anselllandservices.co.uk/digger-services-timber-extraction/

Effects on forest and tribal people

- Increase fragmentation and habitat loss that increase biodiversity extinction
- Loss of carbon storage capacity
- Increase soil erosion
- Reduce water infiltration
- Loss of soil fertility
- Reduce genetic pool
- Increase effects of climate change
- Tribal people are displaced
- Loss of tribal culture



Mining-effects on forest and tribal people

Mining is the process of extraction of minerals and fossil fuel from the earth.

Extraction of minerals and fossil fuels found in forest region require removal of vegetation and underlying soil.

Mining result in clearance of forest on a large scale for extraction of resources as well as setting other infrastructures required for the operation and management of the activity.





Source: https://images.app.goo.gl/TcLpu9p2VSNQ5Rsf8; https://images.app.goo.gl/iqmVVyeshUUE247j9

Effects on forest and tribal people

- Increase habitat loss resulting in biodiversity extinction
- Increase deforestation
- Enhance soil erosion
- Abridge ecological services provided by forest
- Reduce soil fertility and increase land degradation resulting in development of wasteland
- Shrinkage of grazing areas
- Increase water and air pollution
- Displace tribal people, increasing unemployment and cause untimely deaths
- Increased respiratory diseases in people living in nearby areas
- Loss of tribal culture

Dams-effects on forest and tribal people

Dams are manmade structure, constructed or built across water bodies such as rivers to prevent or restrict flow of water.

Dams are generally used to store water, prevent flooding and to generate electricity.

The structure of dam include *artificial lake* known as **reservoir** that holds back water for various uses.



Source: https://images.app.goo.gl/M6v9E2jsDmvfertt8

Effects on forest and tribal people

- Submergence of forest land
- Area get prone to flooding, drought, landslides and earthquakes
- Loss of fertile land
- Loss of habitat leading to biodiversity loss
- Increase siltation of reservoir affect aquatic life
- Increase water logging and soil salinization
- Displace tribal people forcing resettlement and affecting their livelihood
- Increased water-borne diseases
- Spiritual and cultural values of tribal diminish

Dams and their effects- Case study

Sardar Sarovar Dam (Gujarat)- Narmada Bachao Andolan

The Narmada Bachao Andolan in India is an example of a movement against large dams.

Andolan was initiated by Medha Patkar in mid-1980's.

The gigantic Sardar Sarovar Dam built on Narmada river displaced millions of extremely poor tribal people and affected their livelihoods. The poor tribal people lost their homes and traditional way of life. The dam also destroyed the livelihood of fishermen at the estuary.



Source: https://images.app.goo.gl/gWtbda8Tr1Vt1f8z8

