

Raniganj Girls' College

Course Name: Environmental Studies

Course Code : AEE 101

Topic of the Project: DEFORESTATION AND ITS EFFECTS

A Project Report

Submitted by Semester-I Students

(Academic Year 2021-22)

Name of the Student	Registration Number
TRISHA BOURI	113211110048
ALO NATH	113211110050
SATARUPA KAR	113211110075
AFRIN KHATUN	113211110077
PRIYANKA MONDAL	113211110115
SIMA BOURI	113211110118
LAKHIMONI SOREN	113211110125
USHA BADYAKAR	113211110128
TUMPA BOURI	113211110148
APARNA DEY	113211110164
SUNITA HANSDA	113211110165
PUJA HAZRA	113211110175
PRIYA BOURI	113211110182
LIPI MAJI	113211110189
DISHA KALINDI	113211110209
SABBO KHATOON	113211110242
PATAMUNI MADDI	113211110248
SHYAMOLI SOREN	113211110252
CHELANA MALI	113211110267
PRIYANKA MAHATO	113211110268

Place: Raniganj

Date: 09.03.2022

Dinabandhu Keembhakar

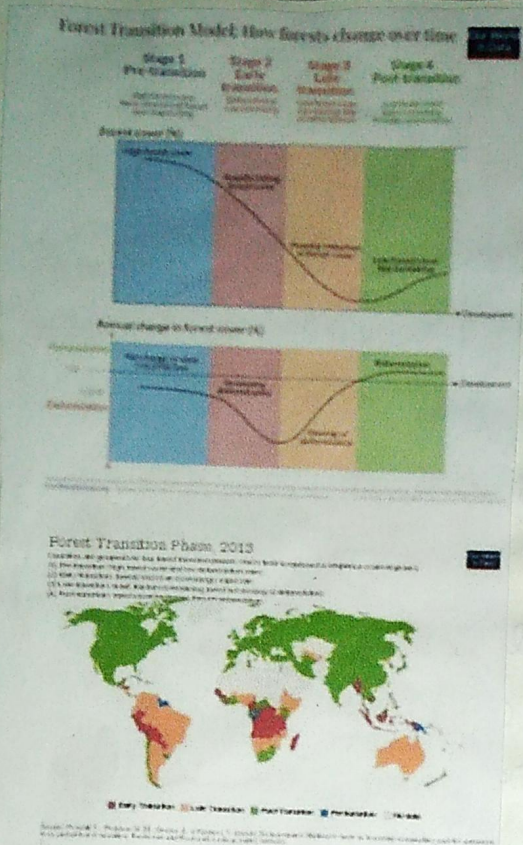
Assistant Professor, Department of Geography

Signature of the supervisor with designation and department.

Rates of deforestation :-

* Present-day :- In 2019, the world lost nearly 12 million hectares of tree cover. Nearly a third of that loss, 3.8 million hectares, occurred within humid tropical primary forests, areas of mature rainforest that are especially important for biodiversity and carbon storage.

Reforestation :- In many parts of the world, especially in East Asian countries, reforestation and afforestation are increasing the area of forested lands. The amount of forest has increased in 22 of the world's 50 most forested nations. Asia as a whole gained 1 million hectares of forest between 2000 and 2005.



Forest Transition Model:
 How forests change over
 time.

KAZI NAZRUL UNIVERSITY

B.A 1st sem ENVS Project

Subject :- ENVS

Course Code :- ~~AECC-001~~ AECC-001

Course Name :- Ability-Enhancement compulsory course (AECC-001)

University Registration No :- 113211110189

Session :- 2021-2022

College Roll No :- 506

College Name :- Raniganj Girls' College

Date of Examination :- 9/3/2022

Topic Name :- Deforestation in Indian



The last batch of Sawntwood from the dead forest in Indragiri, Holo, Sumatra, Indonesia. Deforestation for oil Palm Plantation.



Megal gold mining in Madre de Dios, Peru.



Kazi Nazrul University

Asansol West Bengal - 713340

REGISTRATION CERTIFICATE

This is to certify that **LIPI MAJI**

Son/Daughter of **BIJOY MAJI**

of **RANIGANJ GIRLS' COLLEGE**

is registered as a student of this University,

His/Her registration number is **11321110189 of 2021-22**



Lipi Maji
9/3/2022

Registrar



Illegal logging in Madagascar. In 2009, the vast majority of the illegally obtained rosewood was exported to China.



A satellite image showing deforestation for a palm oil plantation in Malaysia.

Soil :- Due to surface plant litter, forests that are undisturbed have a minimal rate of erosion. The rate of erosion occurs from deforestation, because it decreases the amount of litter covers, which provides protection from surface runoff.

Biodiversity :- Deforestation on a human scale results in decline in biodiversity

and on a natural global scale is known to cause the extinction of many species. The removal or destruction of areas of forest covers has resulted in a degraded environment with reduced biodiversity.

Economic impact :- According to the World Economic Forum, half of the global GDP is strongly or moderately dependent on nature. For every dollar spent on nature restoration, there is a profit of at least 9 dollars. Example of this link is the COVID-19 pandemic, which is linked to nature destruction and caused severe economic damage.

* Damage to forests and other aspects of nature could halve living standards for the world's poor and reduce global GDP by about 7% by 2050, a report concluded at the convention on Biological Diversity meeting in Bonn in 2008.

Forest transition theory :- The forest area

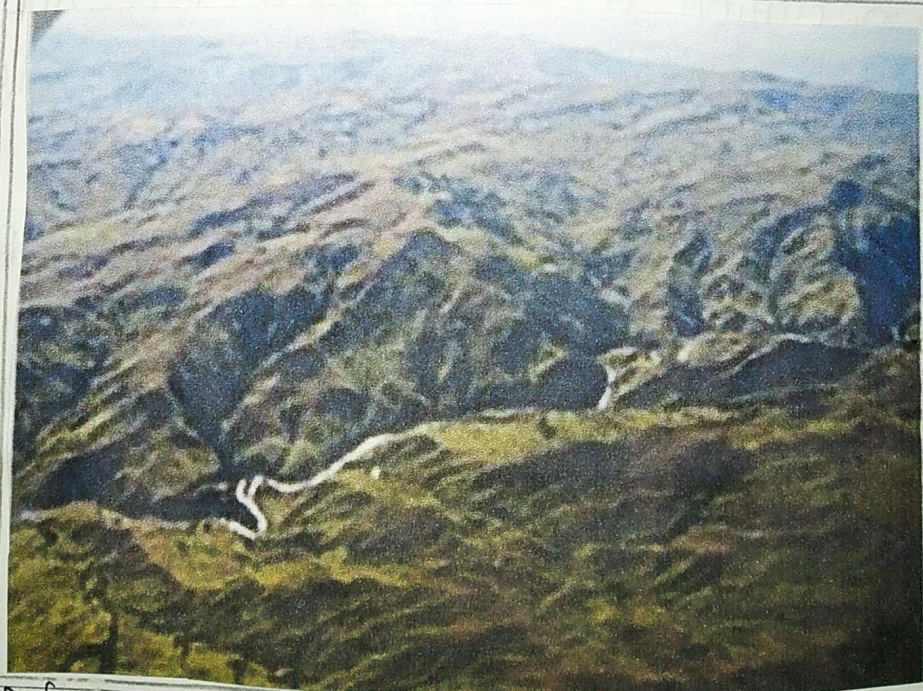
change may follow a pattern suggested by the forest transition theory, where by at early stages in its development a country is characterized by high forest cover and low deforestation rates (HFLD countries).

Industrial era :- The wholesale clearance of woodland to create agriculture.

al land can be seen in many parts of the world such as the central forest-grasslands transition and other areas of the Great Plains of the United States. Specific parallels are seen in the 20th-century deforestation occurring in many developing nations.



Illegal "slash-and-burn" Agriculture in Madagascar, 2010



Deforestation of the Highland Plateau in Madagascar has led to extensive siltation and unstable flows of western rivers.

ACKNOWLEDGMENT :-

I wish to express my gratitude to all my friends, people involved in the completion of this project I am thankful to my ENVS teachers D.K. Sirs for all time and knowledge with me. I would also like to thank my parents who helped me the most in the completion of the project. And finally my deepest gratitude to my friends for these untiring emotions during the making of the project.

Lipi Maji

Student Signature

Date :- 9/3/2022.

introduction :-

What is a forest :- A forest is a complex ecological system in which trees are the dominant life-form. A forest is nature's most efficient ecosystem, with a high rate of photosynthesis affecting both plant and animal systems in a series of complex organic relationships. Forest are two device :- (i) Deforestation and (ii) Reforestation.

Deforestation in India

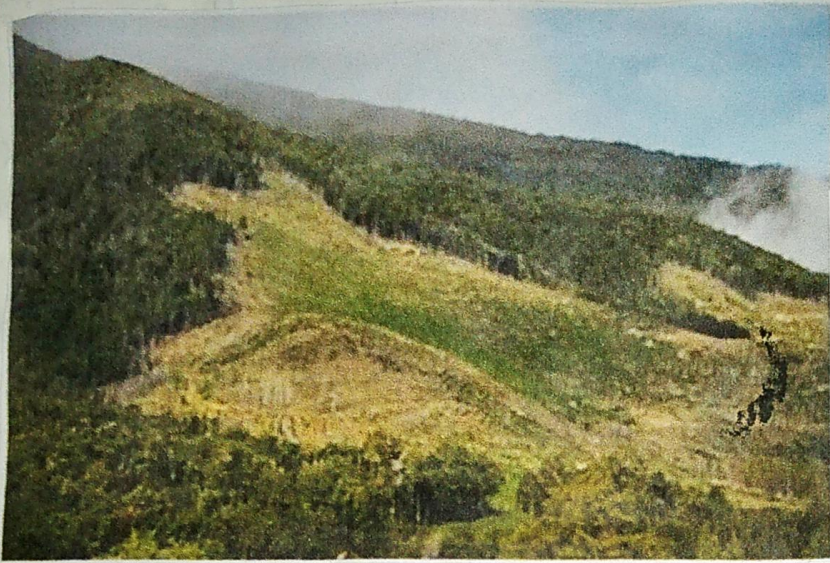
Deforestation :- Deforestation or forest clearance is the removal of a forest or stand of trees from land that is then converted to non-forest use. Deforestation can involve conversion of forest land to farms, ranches, or urban use. The most concentrated deforestation occurs in tropical rainforests. About 31% of Earth's land surface is covered by forests at present. This is one-third less than the forest covers before the expansion of agriculture, a half of that loss occurring in the last century. Between 15 million to 18 million hectares of forest, an area the size of Belgium, are destroyed every year. On average, 2,400 trees are cut down each minute.

* The Food and Agriculture Organization of the United Nations defines deforestation as the conversion of forest to other land uses. "Deforestation" and "forest area net change" are not the same.

Recent history (1970 onwards) :- Deforestation of the Amazon rainforest in Brazil's Maranhao state 2016 for instance. FAO estimate that the global forest carbon stock has decreased 0.9% and tree covers 4.2% between 1990 and 2020.



INDIA :- Top Ten largest forest state covers (2014-2015)



Deforestation in New Zealand.



satellite image of deforestation in progress in eastern Bolivia. worldwide, 10% of wilderness areas were lost between 1990 and 2015.

Hydrological :- The water cycle is also affected by deforestation. Trees extract ground water through their roots and release it into the atmosphere. When part of a forest is removed, the trees no longer transpire this water, resulting in a much drier climate. Deforestation reduces the content of water in the soil and ground water as well as atmospheric moisture.

- * Trees, and plants in general, affect the water cycle significantly.
- Their canopies intercept a proportion of precipitation, which is then evaporated back to the atmosphere.
- Their litter, stems and trunks slow down surface runoff.
- They contribute to terrestrial evaporation and reduce soil moisture via transpiration.
- Their leaves control the humidity of the atmosphere by transpiring. 99% of the water absorbed by the roots moves up to the leaves and is transpired.

The forest carbon stock in Europe increased from 158.7 to 172.4 Gt between 1990 and 2020. In North America, the forest carbon stock increased from 136.6 to 140 Gt in the same period.

Causes :- According to the United Nations Framework Convention on Climate Change Secretariat, the overwhelming direct cause of deforestation is agriculture. Subsistence farming is responsible for 48% of deforestation; commercial agriculture is responsible for 32% logging is responsible for 14% and fuel wood removals make up 5%.

* Experts do not agree on whether industrial logging is an important contributor to global deforestation. Some argue that poor people are more likely to clear forest because they have no alternatives, others that the poor lack the ability to pay for the materials and labour needed to clear forest. One study found that population increases due to high fertility rates were a primary drivers of tropical deforestation in only 8% of cases.