## VIDYASAGAR UNIVERSITY

## **Environmental studies**

## KHARAGPUR COLLEGE

**TOPIC NAME:** 

WATER (PREVANTION AND CONTROL OF POLLUTION) ACT

## SUBMITTED BY

**NAME:** CHANDANI SAHA

**ROLL-** 1111121 **NO-** 220196

**REGISTRATION NO - VU221210080** 

Under the supervision of

MR. Koushik Bhattacharya

### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA

Faculty, Department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR.BIDYUT SAMANTA respected Principal of Kharagpur College.

I would like to express my thanks to my parents for their encouragement, helped for the success and support time to time

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Signature of Candidate



## KHARAGPUR COLLEGE

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of 2<sup>nd</sup> Semester B.A Hons has done project work on "WATER (Preservation and control of pollution"

Under my supervision and guidance. The project report submitted for the completion of environmental studies is in accordance with the regulation of Vidyasagar University.

The project report has been found to be satisfactory and hereby approved.

I wish him ther all success in life



## VIDYASAGAR UNIVERSITY

## PROJECT ON ENVIRONMENTAL STUDIES

#### KHARAGPUR COLLEGE



#### -: TOPIC NAME :-

## Crocodile conservation Initiative

### **SUBMITTED BY:**

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I wish him ther all success in life

### **ACKNOWLEDGEMENT**

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Faculty, Department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR.BIDYUT SAMANTA respected Principal of Kharagpur College.

I would like to express my thanks to my parents for their encouragement, helped for the success and support time to time

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- 8. IUCN-SSC Crocodile Specialist Group
- 9. World Crocodile Day
- 10. Conclusion
- 11. FAQs
- 12. MCQs

## Indian Crocodile Conservation Project

Achievements

\*All three crocodile species have been saved from extinction, and many of their habitats have been added to the state's protected area network.

\*The crocodile project, which has long slowed in the state, has made significant contributions to the development of knowledge and the spread of awareness.

## Crocodile Census in India:-

Officials formed 22 teams to count the crocodiles in all of the creeks and rivers within the park and its surrounding areas, and 1,757 crocodiles were discovered. This was slightly more than last year's total of 1,742 crocodiles.

Crocodile Conservation Programmes in India

- 1) Baula Project in Dangamal
- 2) Mugger Project At Ramatirtha
- 3) Gharial Project at Tikarpada
- 4) Crocodile Captive Breeding in Nandankanan, Odisha

## **IUCN-SSC CROCODILE SPECIALIST GROUP**

The IUCN SSC Crocodile Specialist Group (CSG) is a global network of biologists, wildlife managers, government officials, independent researchers, non-government (NGO) representatives, farmers, traders, tanners, fashion leaders, and private companies dedicated to the conservation of the world's 23 living species of alligators, crocodiles, caimans, and gharials.

## **World Crocodile Day**

\*\*\*\*\*\*\*\*

Every year on June 17th, World Crocodile Day is observed. It is a worldwide awareness campaign to raise awareness about the plight of endangered crocodiles and alligators.

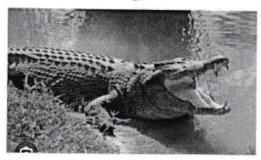
The Crocodile Conservation Project was launched in 1975 in various Indian states to conserve crocodiles.

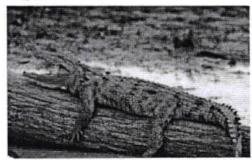
The authorities in charge should conduct public awareness campaigns to highlight the plight of endangered crocodiles.

## Crocodile conservation Initiative

Crocodiles are large semi aquatic reptiles found in the tropics of Africa, Asia, the Americas, and Australia. According to the IUCN Red List of Threatened Species, there are 23 known crocodile species, with 7 listed as Critically Endangered, 4 as Vulnerable, and 12 as Least Risk. The Indian Crocodile Conservation Project has brought once-threatened crocodilians back from the brink of extinction and put them on the road to recovery. The Project has not only produced a large number of crocodiles, but it has also contributed to conservation in a variety of related fields. This scheme focuses on the gharial, saltwater crocodile, and mugger. In this article, we will discuss the Indian Crocodile

## Indian Crocodile Conservation Project - Background





Crocodilians were threatened in India due to indiscriminate commercial killing and severe habitat loss until the Wildlife (Protection) Act of 1972. By the 1970s, all three crocodile species (Gharial, Mugger crocodile, and Saltwater crocodile) in Odisha's river systems were on the verge of extinction.

Orocodiles were scarce due to increased human activity in rivers and other traditional habitats, resulting in a reduction in the extent of habitable stretches. In addition, predation reduces the survival rate of crocodile hatchlings in the wild.

From the 1960s onward, piecemeal efforts were made to save the crocodile.

Dr. H.R.Bustard, an FAO expert hired by UNDP/FAO and the Government of India, studied the prospects of crocodile rehabilitation, and a Crocodile Conservation Project was launched in 1975 in various states based on his report and guidance.

## What is the Indian Crocodile Conservation

Project?

\*The Crocodile Conservation Project was established in various states in 1975.

\*The Gharial and Saltwater Crocodile Conservation Program was launched in Odisha in early 1975, followed by the Mugger Conservation Program.

## Indian Crocodile Conservation Project - Objectives

- \*Creating sanctuaries to protect the remaining crocodilians in their natural habitat
- \*To promote captive breeding.
- \*To conduct research to improve management.

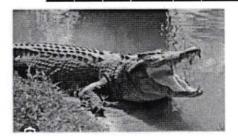
## Crocodile Species Found in India

## Mugger:-

- \*Mugger or Marsh crocodiles are restricted to the Indian subcontinent and are typically found in freshwater habitats such as lakes, marshes, and rivers.
- \*They can also be found in coastal saltwater lagoons and estuaries.



## Saltwater Crocodile:-

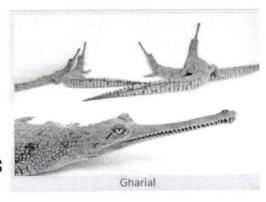


\*The saltwater crocodile, also known as a maneater, is thought to be the largest crocodile species on Earth.

They are also known as estuarine crocodiles.

## Gharial:-

- \*The gharial, also known as the gavial, is the longest living crocodile.
- \*They are called gharial because of their long and thin snouts that resemble an earthen pot (known as "Ghara" in Hindi).



## CONCLUSION

Crocodilians were threatened in India due to indiscriminate killing for commercial purposes and severe habitat loss until the Wildlife (Protection) Act of 1972. The overall strategy for crocodile rehabilitation was to protect them in their natural habitats, rebuild the population quickly through captive breeding (rear and release), and train personnel for the job. To determine the exact number of crocodiles across the country, future censuses must incorporate cutting-edge technology.



## VIDYASAGAR UNIVERSITY

## PROJECT ON ENVIROMENTAL STUDIES

**TOPIC- ENVIROMENTAL PROTECTION ACT** 

## KHARAGPUR COLLEGE



SUBMITTED BY - ANKITA JAISWAL

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VU ROLL NO. - 1112121

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#### "ENVIROMENTAL PROTECTION ACT"

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I wish him / her all success in life

DATE

Signature of supervisor

## **ACKNOWLEGMENT**

I Would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of his project on the environmental protection act

First and foremost, I extend my deepest thanks to Mr KOUSHIK BHATTACHARYA of department of ENVS for their guidance, mentorship and invaluable insights throughout the courde of this project . tour expertise and unwavering support have been instrumental in shaping work

I extend my gratitude to the authorities responsible for implementing the environmental protection act, as well as individual organisation dedicated towards the preservation of environment.

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SESSION -2022-2023

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## **CONTENTS**

- 1. CERTIFICATE
- 2. ACKNOWLEDGEMENT
- 3. INTRODUCTION
- 4. CONSTITUTIONAL PROVISION
- 5. SALENT FEATURES OF EPA
- 6. DRAWBACKS
- 7. NEAA

## INTRODUCTION

**Overview:** The **Environment (Protection) Act (EPA)** was enacted in 1986 with the objective of providing the protection and improvement of the environment.

It **empowers the Central Government** to establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.

The Act is **one of the most comprehensive legislations** with a pretext to protection and improvement of the environment.

**Background:** The roots of the enactment of the EPA lies in the **United Nations Conference on the Human Environment** held at **Stockholm** in June, 1972 (**Stockholm Conference**), in which India participated, to take appropriate steps for the improvement of the human environment.

The Act implements the decisions made at the **Stockholm Conference.** 

## **ConstitutionalProvisions:**

The EPA Act was enacted under Article 253 of the Indian Constitution which provides for the enactment of legislation for giving effect to international agreements.

- Article 48A of the Constitution specifies that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
- Article 51A further provides that every citizen shall protect the environment.
- Coverage: The Act is applicable to the whole of India including the state of Jammu & Kashmir.



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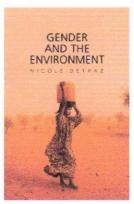


### KHARAGPUR COLLEGE

**Environmental Studies** 

Filed Work On

**Study Of Gender and the Environment** 



**Submitted By** 

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Sri "kousik Bhattahaya" is sincere to his project work and has upgraded his knowledge in the field. The matter and information that have been presented in this dissertation work are quite satisfactory and adequate for the fulfillment of B.A Degree in Hindi Honours as required by Vidyasagar University

Date:

(Signature of the Supervision)
Department of Mathematics
Kharagpur College

## **ACKNOWLEDGEMENT**

I would like to express my special thanks and gratitude to my teacher who gave me the golden opportunity to do this wonderful project, which also helped me to do new things and I came to know about so many new things. I am really thankful to them.

I would like to express my gratitude towards my parents who helped me a lot in finalizing this project within the limited time frame.

My thanks and appreciation also goes to my friends in developing the project and to the people who have willingly helped me out with their abilities.

Poriganka tanti

Thank You



## **VIDYASAGAR UNIVERSITY**

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Environmental Studies

FIELD WORK ON

FOREST CONSERVATION ACT



SUBMITTED BY

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4

## ACKNOWLEDGEMENT

I would like express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the forest conservation act this of several individuals and organizations.

First and foremost, I extend my deepest thanks to buddhadeb mondel department of mathamatics for their guidance, mentorship, and invaluable insights throughout the course of this project. Your expertise and unwavering support have been instrumental in shaping this work.

I would also like to acknowledgement the contributions of my fellow project team members your commitment, teamwork, and collaborship spirit have been crucial in conducting research, gathering data, and analyzing information related to the forest conservation act.

Finally, I extend my gratitude to authorities responsible for implement the forest conservation act, as well as all the individuals and organization dedicated to the preservation of our forest and natural habitats. your tireless efforts and commitment to protecting our forest are commendable and serve as an inspiration for this project.

In conclusion, this project on the forest conservation act would not have been possible without the collective effort and support of all those mentioned above. Your contributions have helped raise awareness about the critical need to conserve our precious forest and uphold the principles of the forest conservation act. Thank you for bering part important endeavor.

Student Name: Devki kalyani

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Registration no: VU221210097

Session: 2022 - 23

Devki kalyani

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# VIDYASAGAR UNIVERSITY KHARAGPUR COLLEGE

### PROJECT ON ENVIRONMENTAL STUDIES

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WILDLIFE CONSERVATION PROJECT: INDIAN RHINO VISION 2020

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I wish him ther all success in life

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA

Faculty, Department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR.BIDYUT SAMANTA respected Principal of Kharagpur College.

I would like to express my thanks to my parents for their encouragement, helped for the success and support time to time

Place: Kharagpur

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Sawar Kumar

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- 6. TRAFFIC RELATED ENVIRONMENTAL LAW.



## VIDYASAGAR UNIVERSITY

## PROJECT ON ENVIRONMENTAL STUDIES

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I wish him ther all success in life

### **ACKNOWLEDGEMENT**

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Faculty, Department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

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I would like to express my thanks to my parents for their encouragement, helped for the success and support time to time

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Date:

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### CONSERVATION BIOLOGY

## KHARAGPUR COLLAGE

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Dr. Kousik Bhattacharya Department of mathematic KHARAGPUR COLLEGE

### **ACKNOWLEDGEMENTS**

I like to express my deep sense of gratitude to PROF. Kousik Bhattacharya, Faculty. department of Mathematics, Kharagpur collage, for his constant encouragement, guidance and instructions.

I am also very thankful to DR. BIDYUT SAMANTA, respected Principal of Kharagpur Collage.

I would like to express my thanks to my parents for their encouragements, helped for the success and support time to time.

Place: KHARAGPUR

Date:

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- 3. Conservation Economics
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## PROJECT ON

## **ENVIRONMENTAL STUDIES**

## KHARAGPUR COLLEGE

: TOPIC NAME:

Wildlife conservation project: project tiger



: SUBMITTED BY:

SONY KAITHAWAS

PROGRAM: BA HINDI HONOURS

SEMESTER: 2ND

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I wish him/her all success in life.

Dr.Kousik Bhattacharya

Department of mathematic

KHARAGPUR COLLEGE



I like to express my deep sense of gratitude to PROF.Kousik Bhattacharya, Faculty. department of Mathematics, Kharagpur collage.

for his constant encouragement, guidance and instructions

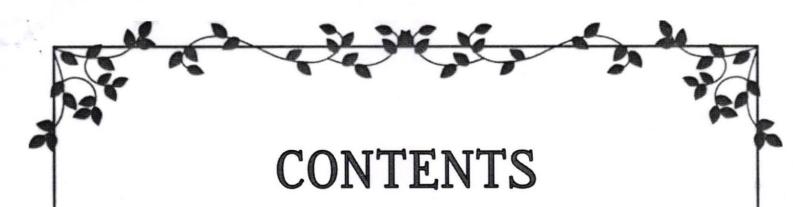
I am also very thankful to DR. BIDYUT SAMANTA, respected Principal of Kharagpur Collage.

I would like to express my thanks to my parents for their encouragements, helped for the success and support time to time.

Place: KHARAGPUR

Date:

Signature of the Candidate



- INTRODUCTION
- OBJECTIVES
- WHAT IS PROJECT TIGER?
- PROGRAMMES ABOUT PROJECT TIGER
- LAST TIGER STATUS
- TIGER RESERVES IN INDIA
- CAUSES OF DEPLETION
- MEASURES TAKEN FOR THE PROTECTION OF
- REASONS FOR FAILURE OF PROJECT TIGER
- REFERENCE



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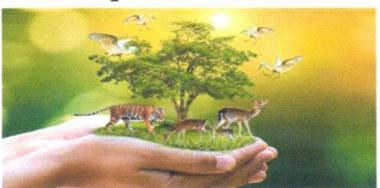


## KHARAGPUR COLLEGE

#### Environmental Studies

Filed Work On

Wildlife Protection Act



Name: Chetan Sahoo

Rolb: 1112121 No: 220197

Registration No: - VU221210081 of 2022-2023

UNDER THE SUPERVISION OF

PROF,:-

DIDARTMENT OF MATHS





#### India, Kharagpur, Paschim Medinipur

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For the Partial fulfillment of the requirement of Environmental Studies for the degree B.SC has been carried out under my supervision.

Chetan sahu is sincere to his project and has upgraded his knowledge in the field.

This project, undertaken with diligence and commitment, involved comprehensive research, analysis, and presentation on the subject of wildlife conservation and the legal framework provided by the Wildlife Protection Act.

The matter and the information that have been presented in the dissertation work are quite satisfactory and adquete for the fulfillment of B.Sc degree in Accountancy Honours as required by Vidyasagar University.

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Signature of the supervisor

Dipartment of Mathematics

## ACKNOWLEDGE

I would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the Wildlife Protection Act. This endeavor would not have been possible without the collective effort, dedication, and support of several individuals and organizations.

First and foremost, I extend my deepest thanks to Buddhadeb Mondal, Department of Mathematics for their guidance, mentorship, and invaluable insights throughout the course of this project. Your expertise and unwavering support have been instrumental in shaping this work.

I would also like to acknowledge the contributions of my fellow project team members Your commitment, teamwork, and collaborative spirit have been crucial in conducting research,

gathering data, and analyzing information related to the Wildlife Protection Act.

Finally, I extend my gratitude to the authorities responsible for implementing the Wildlife Protection Act, as well as all the individuals and organizations dedicated to the preservation of our wildlife and natural habitats. Your tireless efforts and commitment to protecting our wildlife are commendable and serve as an inspiration for this project.

In conclusion, this project on the Wildlife Protection Act would not have been possible without the collective effort and support of all those mentioned above. Your contributions have helped raise awareness about the critical need to conserve our precious wildlife and uphold the principles of the Wildlife Protection Act. Thank you for being part of this important endeavor.

Chifan Sahwi Student Name :- Chetan Sahoo

Roll: 1112121

No.:- 220197

Registration No.:- VU221210081

Season:- 2023-2024

Signature of Teacher

Dipartment of Mathematics



Wildlife Protection Act
Sanctuaries
National park
Community reserves
Wildlife tourism
Wildlife trade
Case law
Conservation reserves
Lack of coordination
Penalties
Preliminary
Protection of endangered species
Protection of wildlife in India
Recognition of zoos
Scheduled species
Seizure and forfeiture of property
Tiger reserves
Wildlife conflict
Conclusion
References
Acknowledgement
Certificate



#### VIDYASAGAR UNIVERSITY

# PROJECT ON ENVIRONMENTAL STUDIES

#### KHARAGPUR COLLEGE



#### : TOPIC NAME:

# IS GLOBAL WARMING A NATURAL PHENOMENON

#### : SUBMITTED BY:

RAKHEE KUMARI

PROGRAMME: B.A HONS

SEMESTER: 2ND

REGISTRATION NO.: VU221210292 of 2022 - 2023

VU ROLL NO. : 1112121 - 220222 COLLEGE ROLL NO. : 2213030



#### KHARAGPUR COLLEGE

#### KHARAGPUR

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This is to certify that RAKHEE KUMARI [REG. NO: VU221210292, YEAR: 2022-23] of 2<sup>nd</sup> Semester B. A. Hons has done Project Work on Impact of "IS GLOBAL WARMING A NATURAL PHENOMENON".

under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA

Department of Mathematics
KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA, Faculty, department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

also very thankful to DR. BIDYUT SAMANTA respected principal of Kharagpur College.

I would like to express my thanks to my parents and their encouragements, helpent for the success and support time to time.

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Date:

Rakhee Kumazci
Signature of Candidate

## **VIDYASAGAR UNIVERSITY**

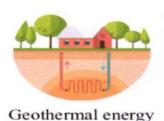
## project of environmental studies



SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE PROJECT ON THE TOPIC RENEWABLE ENERGY FOR THE DEGREE OF B.A.HONOURS



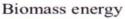




y Solar energy

RENEWABLE ENERGY







Hydro energy



Tidal energy

SUBMITTED BY:- P.NANDINI

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REGISTRATION NO:-VU221210231 OF 2022-2023

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## **CERTIFICATE**

This is certify that the project work on "<u>RENEWABLE ENERGY</u>" submitted by "<u>P.nandini</u>",a student of kharagpur collage, department of arts bearing roll:-"<u>1112121</u>" No:-"<u>220214</u>" & registration No:-"<u>VU221210231</u>" of "<u>2022-2023</u>" for the partial fulfillment of the requirement for the project work on blood donation for the degree of B.A.honours has being carried out under my supervision.

Sir "Kousik bhattacharya", is sincere to his project work and has upgraded his knowledge in the field.the matter and information that have been presented in this dissertation work are quite satisfactory and adequate for the fulfillment of B.A.Honours.degree in hindi honours as required by Vidyasagar University.

_	
Date:	
Date.	

(signature of the supervisor)

Department of mathematics

Kharagpur collage

## **ACKNOWLEDGEMENT**

I would like to express my special thanks of gratitude to my teacher "Kousik bhattacharya" who gave me the golden opportunity to do this wonderful project on the topic review work on "RENEWABLE ENERGY", which also helped me in doing a lot of research and came to know about so many new thinks I am really thankful to my sir. Secondly I would also like to thank my parents and friends who helped me a lot in finishing this project within the limited time. I am making this project not only for marks but also to increase my knowledge.

Thanks again to all who helped me.

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ROLL:-1112121

NO:-220214

**REGISTERATION NO:-UV221210231** 

OF 2022-2023

SESSION:-2022-2023

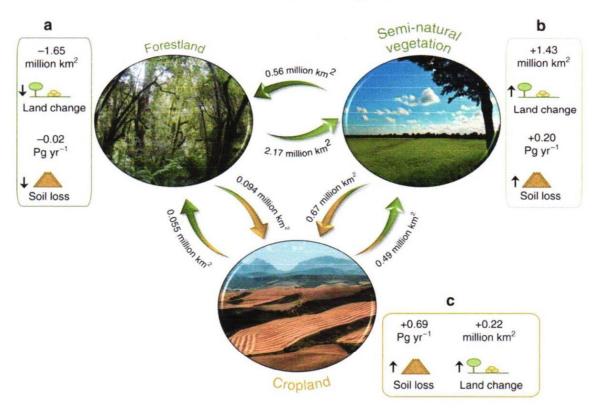
DEPARTMENT OF ARTS,

KHARAGPUR COLLAGE

#### VIDYASAGAR UNIVERSITY



Submitted for the partial fulfilment of the requirement for unit-08 Environmental Studies, for the degree of B.A



Submitted by: Nitu Sharma

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Session: 2022-23

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#### CERTIFICATE

This is to show that the project works on "LAND USE EFFECT".

NITU SHARMA, student of Kharagpur College Department of Hindi Honours, Roll-No-220213 & Registration No-VU221210230 of 2022-2023

The Partial fulfilment of the requirement of Hindi Literature for the degree B.A(Honours) has been carried out under my supervision.

NITU SHARMA is sincere in his project and has upgraded his knowledge in the field.

This project, undertaken with diligence and commitment, involved comprehensive research, analysis, and presentation on the subject of wildlife conservation and the legal framework provided by the Wildlife Protection Act.

The matter and the information that has been presented in the dissertation work are quite satisfactory and adequate for the fulfilment of a degree in BA. Hindi Honours as required by Vidyasagar University

Date:-

Signature of the Supervisor

Department of Hindi Honours

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA

Faculty, Department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR.BIDYUT SAMANTA respected Principal of Kharagpur College.

I would like to express my thanks to my parents for their encouragement, helped for the success and support time to time

Place: Kharagpur

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#### **Context:**

#### Introduction

Types of Land use effect

Impact of Land use changes

- Greenhouse gas
- Global warming
- Climate change
- Land management
- Land cover

Conclusion

#### INTRODUCTION

Land use is a major anthropogenic change that has reshaped the earth's surface, thereby affecting all of the earth's ecological functions (Steffen et al., 2007). Thus, understanding the impacts of land use change ("land use science") is essential for mitigating the consequences of human–environment interactions.

Land use change (LUC) is one of the key factors that drive changes in human activity and the natural environment, and must therefore be accurately quantified to understand the impacts of such changes (Mendoza et al., 2011). LUC involves a range of alterations to the earth's surface (Arsanjani, 2012; Ellis, 2013). LUC includes land cover changes, since the term includes changes that do not involve subsequent human use of the land (Ellis, 2013). In terms of sustainable development, LUC strongly affects (and is affected by) global climate change, and the resulting ecosystem responses (Abd El-Kawy et al., 2011; Janssen et al., 2008). Most of the world's developing countries are experiencing rapid LUC driven by population growth and the lifestyle changes that result from income growth

#### **Types of Land Use Effect**

One of the most important natural resources, upon which all human activity is based since time immemorial, island. Therefore, humans have changed the terrestrial and aquatic systems on the land for centuries to fulfil their basic neaeds, and this led to modifications in global land use, atmospheric gaseous concentrations as well as the soil capacity to sequester carbon in future (Dale et al. been described in various ways, attributes of the biosphere immediately above or below this surface including those of the near-surface climate the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes, and swamps), the near-surface sedimentary layers and associated groundwater reserve, the plant and animal populations, the human settlement patterns, and the physical outcome of the past and present human activity (terracing, water storage or landforms, climate, hydrology, vegetation and fauna, together with land improvements such as terraces and drainage work. Land includes all elements of the physical and biological environment that influence land use. Land use is the management of land to meet human needs, i.e., the purpose for which land is set by humans. Protected areas, forestry for timber products, plantations, row-crop agriculture, pastures, or human settlements, are some common land uses set by humans (Turner and Meyer 1994, Dale et al. 2000). Food and Agricultural Organization (FAO) identified three land use classes based on FAO forest definition (FAO 2013):

I. Forest (Lands): Land spanning more than 0.5 ha with trees higher than 5 m and a canopy cover of more than 10 per cent, or trees able to reach these thresholds in situ. It does not include the land predominantly under agricultural or urban land use.

II. Other Wooded Land: Land not classified as Forest, spanning more than 0.5 ha; with trees higher than 5 m and a canopy cover of 5-10 per cent, or trees able to Land Use, Land Use Change and Sustainable Land Management 345reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees above 10 per cent. It does not include land that is predominantly under agricultural or urban land use.

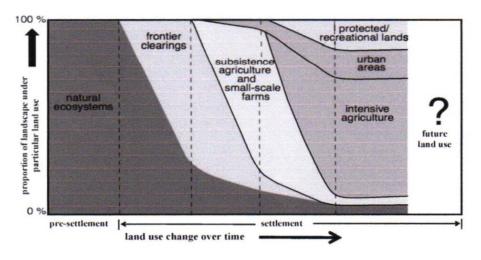
III. Other Land: All land that is not classified as Forest (land) or Other Wooded Land. It includes agricultural land, meadows and pastures, built-up areas (including settlements and infrastructure), barren land, land under permanent ice, other land with tree cover, and other land with trees outside forest (TOF). Other land is further categorized into three sub categories:

(a) Other Land with Tree Cover: It is other land spanning more than 0.5 hectares with a canopy cover of more than 10 percent or trees able to reach a height of 5 m at maturity. The difference between Forest and Other land with tree cover is the land use criterion. It includes groups of trees and scattered trees in agricultural landscapes, parks, gardens and around buildings, provided that area, height and canopy cover criteria are met. It also includes tree stands in agricultural production. systems e.g., fruit tree plantations and agroforestry systems when crops are grown under tree cover.

(b) Other Land with TOF: It is other Land spanning more than 0.05 ha with trees higher than 5 m and a canopy cover above 5 percent, or with trees able to reach these thresholds in situ; or with a combined cover of shrubs and trees above 10 percent. It includes land with trees or/and shrubs predominantly under agricultural or urban use. It also includes some land with trees or/and shrubs that is not predominantly under agricultural or urban use with an area spanning less than 0.5 ha or a width of less than 20 m but more than 3 m e.g., windbreaks, shelterbelts and corridors of trees and shrubs.

(c) Other Land with No TOF: It is other Land not classified as Other Land with TOF i.e., area is < 0.05 ha, canopy cover < 5 per cent if trees are present, or < 10 per cent if combined trees, bushes and shrubs, or for linear structures a width < 3 m or length < 25m. For example, inland water bodies, barren land, stone outcrops, snow caps and glaciers, deserts, peat bogs, meadows without trees, annual crops without trees, etc

Land Use, Land Use Change and Sustainable Land Management



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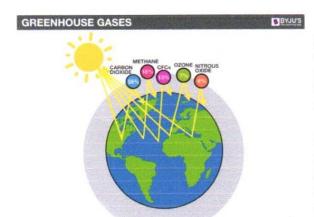
Figure 1. Land use changes. Changes in land use activities that may be followed within a given region over time. As with demographic and economic changes, societies also appear to follow a sequence of different land use regimes i.e., from pre-settlement natural vegetation land use regime to different settlement land use regimes. Furthermore, not all parts of the world move linearly through these land uses. Rather, some places remain in one stage of land use for a long period of time, while others move rapidly between different stages of land use.

#### What are the impact of land use changes?

- 1. Greenhouse gas
- 2. Global warming
- 3. Climate change
- 4. Land management
- 5. Land cover

Land use changes have significant impacts on various aspects such as economic growth, quality of life, management of environmental resources, national food supply, soil erosion, sedimentation, soil microbial diversity, hydrological processes, river discharge, greenhouse gas emissions, global carbon cycle, Earth's radiation balance, temperature, agriculture, rural communities, water and soil conservation, open space preservation, infrastructure costs, nonpoint source pollution, habitat fragmentation, commuting time, and ecological effects. These impacts can lead to environmental degradation, loss of natural resources, changes in climate, and negative socio-economic consequences. Understanding the relationship between land use changes and these impacts is crucial for effective land management, conservation strategies, and policy development.

Elaborating the impacts as under:



Greenhouse gas: The gases act like the glass walls of a greenhouse – hence the name, greenhouse gases. Without this greenhouse effect, temperatures would drop to as low as -18°C (-0.4°F); too cold to sustain life on earth.

But human activities are changing earth's natural greenhouse effect with a dramatic increase in the release of greenhouse gases. Scientists agree greenhouse gases are the cause of global warming and climate change.

Since the Industrial Revolution, humans have been releasing larger quantities of greenhouse gases into the atmosphere. In the past century that amount has increased dramatically, with the knock-on effect of global warming. Global temperatures have accelerated in the past 30 years and are now the highest since records began.



Global warming: Global warming is the phenomenon of a gradual increase in the temperature near the earth's surface. This phenomenon has been observed over the past one or two centuries. This change has disturbed the climatic pattern of the earth. However, the concept of global warming is quite controversial but the scientists have

provided relevant data in support of the fact that the temperature of the earth is rising constantly.

There are several causes of global warming, which have a negative effect on humans, plants and animals. These causes may be natural or might be the outcome of human activities. In order to curb the issues, it is very important to understand the negative impacts of global warming.



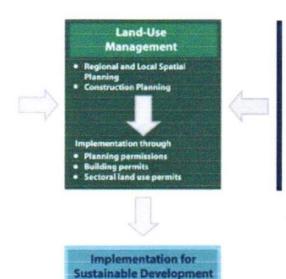
Climate change: Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term.

Changes observed in Earth's climate since the mid-20th century are driven by human activities, particularly fossil fuel burning, which increases heat-trapping greenhouse gas levels in Earth's atmosphere, raising Earth's average surface temperature. Natural

processes, which have been overwhelmed by human activities, can also contribute to climate change, including internal variability.

Scientists use observations from the ground, air, and space, along with computer models, to monitor and study past, present, and future climate change. Climate data records provide evidence of climate change key indicators, such as global land and ocean temperature increases; rising sea levels; ice loss at Earth's poles and in mountain glaciers; frequency and severity changes in extreme weather such as hurricanes, heatwaves, wildfires, droughts, floods, and precipitation; and cloud and vegetation cover changes.

"Climate change" and "global warming" are often used interchangeably but have distinct meanings. Similarly, the terms "weather" and "climate" are sometimes confused, though they refer to events with broadly different spatial- and timescales.



Land management: Land Management is the process of managing the use and development of land resources (in both urban and rural settings, but it is mostly managed in Urban places). Land resources are used for a variety of purposes which may include organic agriculture, reforestation, water resource management and eco-tourism projects. Land management can have positive can have positive or negative effects on the terrestrial ecosystems. Land being over- or misused can degrade and reduce productivity and disrupt natural equilibrium.

Land management refers to land's correct usage and maintenance as per its features and requirements. Land management necessitates decision-making and is influenced by the function it fulfils, such as agricultural production, habitation, recreational, mineral extraction, and the character and features of the land. Land management has several facets. Although it is applied primarily to farming and agricultural cultivation, it encompasses other activities such as habitation, urban and industrial expansion, transportation and roads, recreation activities, mines, and environmental conservation.

#### Land Use and Land Cover

- Land cover
  - · what you find on a patch of land,
  - · and it often depends on how the land is used.
  - For example, land cover might be a forest, a field of grain, or a parking lot.
- There are different types of land cover and different human uses for each cover type.

Land cover: Land cover is the physical material at the surface of Earth. Land covers include grass, asphalt, trees, bare ground, water, etc. Earth cover is the expression used by ecologist Frederick Edward Clements that has its closest modern being vegetation. The equivalent expression continues to be used by the United States Bureau of Land Management.

There are two primary methods for capturing information on land cover:

field survey, and analysis of remotely sensed imagery. Land change models can be built from these types of data to assess changes in land cover over time.

One of the major land cover issues (as with all natural resource inventories) is that every survey defines similarly named categories in different ways. For instance, there are many definitions of "forest"—sometimes within the same organisation—that may or may not incorporate a number of different forest features (e.g., stand height, canopy cover, strip width, inclusion of grasses, and rates of growth for timber production). Areas without trees may be classified as forest cover "if the intention is to re-plant" (UK and Ireland), while areas with many trees may not be labelled as forest "if the trees are not growing fast enough.

#### Conclusion

Rural areas are extremely diverse and the relationship between the management and use of land, and the development of rural economies is complex. Increased demand for environmentally farmland-based countryside amenities may, in some circumstances, result in conflict between farm and non-farm activities. Intensification and specialisation of rural land-management practices in environmentally-good land, in economically integrated rural areas, could be threatening to the provision of ecological services, although it could improve eco-efficiency (as it uses smaller amounts of chemical inputs per unit of output). On environmentally-sensitive land, on economically marginal remote rural areas, low input and production could contribute towards preserving the diversity of the cultural landscape, but they could also be adverse effects: neglect of land management; abandonment; and afforestation, with variable consequences for the provision of farmland-based environmental rural amenities.

In virtually all OECD countries there is a concern with farmland-use management, as farmland provides benefits that go far beyond its ability to produce food and fibre. Agriculture, as the largest user of rural land in OECD countries, not only serves as a source for economic returns, but also preserves habitats and biodiversity, provides a carbon sink and contributes to the conservation of water and soil resources. It also contributes to the preservation of open rural space and the maintenance of characteristic landscape features, which are largely responsible for the recreational value of agricultural land. Changes in land use and land cover are important driving forces in global as well as localised environmental change.

The preservation of an environmentally sustainable rural environment is a key ingredient in harnessing the long-term development potential of rural areas. The ecological balance and the scenic value of a landscape can make rural areas attractive for the establishment of enterprises, as places to live, and for the tourist and recreation businesses. The environmental and landscape assets generated through agricultural land management often have the characteristics of public goods, and as such policy measures are required to ensure delivery at socially desired levels.

#### Reference

• Introduction: https://unfccc.int/topics/introduction-to-land-use

#### Types of land use of effects:

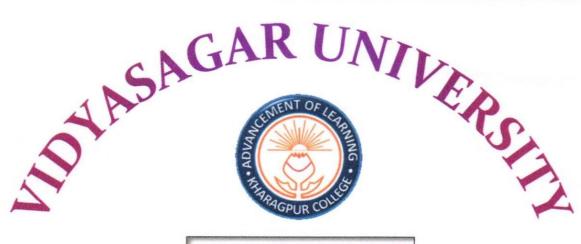
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#### Impact of land use changes:

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beEAxVXUGwGHVUxDkQQ4dUDCBA&uact=5&oq=land+cover+effects&gs\_lp=Egxnd3Mtd2l6LXNlcnAiEmxhbmQgY292ZXIgZWZmZWN0czIGEAAYFhgeMgYQABgWGB4yBhAAGBYYHjIGEAAYFhgeMgoQABgWGB4YDxgKMggQABgWGB4YDzIIEAAYFhgeGA8yCBAAGBYYHhgPMgYQABgWGB4yBhAAGBYYHkjVKlD3BFiVJ3ABeAGQAQCYAewBoAHUGaoBBjAuMTQuM7gBA8gBAPgBAcICChAAGEcYlgQYsAPCAg0QABiABBiKBRhDGLADwgIKECMYgAQYigUYJ8ICBRAAGIAEwgIKEAAYgAQYFBiHAslCChAAGIAEGIoFGEPCAgsQABiABBiKBRiRAslCBxAAGIAEGA2IBgGQBgo&sclient=gws-wiz-serp

• Conclusion: <a href="https://www.oecd-ilibrary.org/sites/eacb0ce8-en/index.html?itemId=/content/component/eacb0ce8-en/">https://www.oecd-ilibrary.org/sites/eacb0ce8-en/index.html?itemId=/content/component/eacb0ce8-en/</a>



**AFFILITED TO** 

### **KHARAGPUR COLLEGE**

**Environmental Studies** 

Filed Work On

#### **ENVIRONMENTAL POLLUTION**



#### **Submitted By**

#### NAME-NANDINI RAJAK

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PROJECT ON THE TOPIC: ENVIRONMENTAL POLLUTION WHICH HELPS

ME IN DOING A LOT OF RESEARCH AND I CAME TO KNOW ABOUT MANY

NEW THINGS SO I AM VERY THANKFUL TO THEM.

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SESSION: 2022 - 23

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Department of Hindi Honurs Kharagpur Collage

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- Pollution Biomarkers In Environmental
   Bio monitoring: An Insight Into Air Pollution
- Environmental Pollution: Causes, Effects, And The Remedies
- Crispr-Assisted Strategies For Futuristic Phytoremediation

## VIDYASAGAR UNIVERSITY



# Affilited to KHARAGPUR COLLEGE

**Environmental Studies** 

Filed work on

" GENDER AND THE GLOBAL ENVIRONMENT "



**Submitted By:** 

me: PRAVEEN GOUR

Roll:1112121 No: 220215

Registration No: VU221210252

Under the Supervision of, Mr. Koushik Bhattacharya

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#### **CERTIFICATE**

This is to clarify that the project work on "GENDER AND THE GLOBAL ENVIRONMENT" by 'PRAVEEN GOUR' student of Kharagpur college, Department of Hindi, Roll- 1112121 NO- 220215, and Registration No VU221210252.

For the partial fulfilment of the required of Environment studies for the degree B.A (Honours) has been carried out under my supervision.

PRAVEEN GOUR is sincere to her project and has upgrade her knowledge in the field.

This project, under with diligence and commitment, involved comprehensive research, analysis and presentation on the subject of " **GENDER AND THE GLOBAL ENVIRONMENT**".

The matter and the information that have been presented in the dissertation work are quiet satisfactory and adequate for the fulfilment of **B.A Degree in Hindi ( Honours )** as required by Vidyasagar university.

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Supervisor

signature of the

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I would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the topic on "GENDER AND THE GLOBAL ENVIRONMENT". This endeavour would not have been possible without the collective effort, dedication, and support of several individuals and organisations.

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I would also like to acknowledge the contribution of my fellow project team members. Your commitment, teamwork, and collaborative spirit have been crucial in conducting research, gattering data and analysing information related to the "GENDER AND THE GLOBAL ENIROMENT".

Finally, I extend my gratitude to the authorities responsible for important the initiative for Global Environment . your tireless efforts and commitment to protecting our wildlife are commendable and serve as an inspiration for this project.

In conclusion, this project on the "GENDER AND THE GLOBAL ENIRONMENT" would not have been possible without the collective effort and support of all those mentioned above. Your contribution have been helped to rasie awareness about the critical need to conserver out precious wildlife and uphold the principles of Global Environment. Thank you for being part of this important and endeavour.

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Roll no - 1112121

No - 220215

Registration No - VU221210252

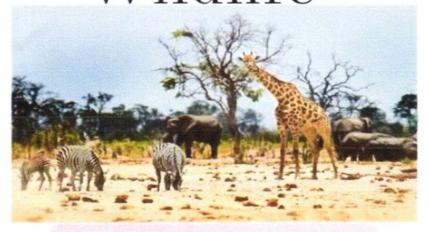
Signature of Teacher

Session: 2022-23

(Department of Mathematics)

# Vidyasagar University Affiliated to Kharagpur college

ENVIRONMENTAL STUDIES
Work on
Wildlife



## Submitted by

Name \_\_ Mahak sharma Roll -- 1112121 No \_\_ 220205 Reg no -- VU221210167 of 2022-23

Under the supervision of

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# Acknowledgement

I would like to express my special thanks of guidence my teachers

Who gave me the golden opportunity to do thi wonderful project on the topic review work on "wildlife" which also helped me in doing a lot of research and I come to know about so many new things I am really thankful to my sir. Secondly I would also like to thank me parents sand friends who help me a lot in finishing this project within the limited time.i am making this project not only mark but also increase my knowledge.

Thanks again who all help me

Name--mahak Sharma
Roll--1112121 no--220205
Reg no --VU221210167
Session --2022 -2023



#### KHARAGPUR COLLEGE

#### KHARAGPUR

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P.S.- Kharagpur(T), Dist .-Paschim Mednipur , West Bengal, Pin -721301

## Certificate

This Is To Certify That

MAHAK SHARMA

[REG:-VU221210167, YEAR:2022-23]

OF  $2^{ND}$  SEMESTER B.A GENERAL HAS DONE PROJECT WORK ON

"IMPACTT OF DEFORESTATION OM BIODIVERSITY"
UNDER MY SUPERVISION AND GUIDANCE, THE PROJECT REPORT
SUMBMITTED FOR THE COMPLETION OF ENVIRONMENTAL STUDIES IS IN
ACCORDANCE WIH THE REGULATION OF VIDYASAGAR UNIVERSITY. THE
PROJECT REPORT HAS BEEN FOUND TO BE SATISFACTORY AND IS HEREBY
APPROVED

I WISH HIM/HER ALL SUCCESS IN LIFE

DR. KOUSHIK BHATACHARYA DEPARTMENT OF MATHAMATICS KHARAGPUR COLLEGE

## CONTENTS

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- \*Wildlife conservation act
- \*Project tiger
- \*Project elephant
- \*Indian crocodile conversation project
- \*Endangered species of animals
- \*Did you know
- \*Conclusions
- \*Refres



## VIDYASAGAR UNIVERSITY

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## KHARAGPUR COLLEGE

**PROJECT REPORT ON** 

#### **ENVIRONMENTAL STUDIES**



**Title** 

**Environmental policy and Gender Issues** 

Submitted by:

#### PRIYANKA MAJHI

College Roll: 2213026

University Roll No: 1112121-220217

Reg No: VU221210264

Under the supervision of

Dr. Kousik Bhattacharya Department Of Mathematics

**Kharagpur College** 

2024

#### Acknowledgement

When all good things come to an end, memories are left behind. In this regard, I feel obliged to all those who helped me to see this day.

To begin with I would like to express my deep sense of gratitude to Prof. Dr. Kousik Bhattacharya, my supervisor, for this valuable guidance, constant supervision, encouraging suggestion, motivation and pain taking efforts throughout the period of my project work of Environmental studies report.

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Priyanka Majhi

PRIYANKA MAJHI
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#### TO WHOM IT MAY CONCERN

This is to certify that the project report entitled **Study of Environmental policy and Gender Issues**, has carried out by **PRIYANKA MAJHI**, College Roll No: **2213026**, Roll No: **1112121-220217**, Reg. No: **VU221210264** of **2022-2023**, a student of **I Semester of B.A.** in **Hindi (H)** under my direct supervision and no part of this project work is not produced anywhere for evaluation. The project work is quite satisfactory and up to the standard for the partial fulfilment of B.A. degree in Hindi (H) under Vidyasagar University.

He/She has been submitted an 'Environmental Studies report' for evaluation.

I wish his/her all success.

Dr. Kousik Bhattacharya

Department Of Mathematics

Kharagpur College

# Conclusions

• Gendered disinformation is a form of harmful speech which can negatively affect gender equality and endanger public policies and the proper application of legislation in this field. However, restrictive measures would not be acceptable as remedies. The most powerful
antidotes to gendered disinformation are gender-sensitive journalism
and a well-informed and digitally literate population. (With access to
multiple, diverse media and information sources, and multifaceted,
multi-stakeholder approaches involving States, companies and civil
society, including women's groups.)
Guarantee of the presence of women within the media, i.e., as
journalists and other media staff, collaborators, experts, managers, or
owners, is generally absent, in terms of compulsory provisions, in
media legislation.
☐ Women media professionals face several gender-based challenges
that contribute to limiting their right to freedom of expression, such as
sexual harassment and gender-based violence. It is of fundamental
importance to acknowledge the specific risks they face in the course of
their work, and the importance of taking a gender-sensitive approach
when considering measures to address the safety of journalists.
☐ Media legal frameworks generally focus on gender equality and
women representation in media content, particularly when it comes to
combatting or avoiding sexist prejudices and stereotypes. Proper and
proportionate provisions might be considered in this area provided they
do not interfere with media freedom.



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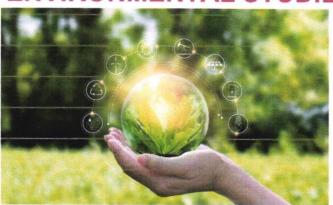
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**PROJECT REPORT ON** 

#### **ENVIRONMENTAL STUDIES**



**Title** 

#### **CONVENTION ON BIOLOGICAL DIVERSITY**

Submitted by:

#### **KHUSHI THAKUR**

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#### Acknowledgement

When all good things come to an end, memories are left behind. In this regard, I feel obliged to all those who helped me to see this day.

To begin with I would like to express my deep sense of gratitude to Prof. Dr. Kousik Bhattacharya, my supervisor, for this valuable guidance, constant supervision, encouraging suggestion, motivation and pain taking efforts throughout the period of my project work of Environmental studies.

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#### TO WHOM IT MAY CONCERN

This is to certify that the project report entitled **Study of CONVENTION ON BIOLOGICAL DIVERSITY**, has carried out by **KHUSHI THAKUR**, College Roll No: **22***13011*, Roll No: **1112121-220201**, Reg. No: **VU221210150** of **2022-2023**, a student of **Semester -II of B.A.** in **Hindi (H)** under my direct supervision and no part of this project work is not produced anywhere for evaluation. The project work is quite satisfactory and up to the standard for the partial fulfilment of B.A. degree in Hindi (H) under Vidyasagar University.

He/She has been submitted an 'Environmental Studies report' for evaluation.

I wish his/her all success.

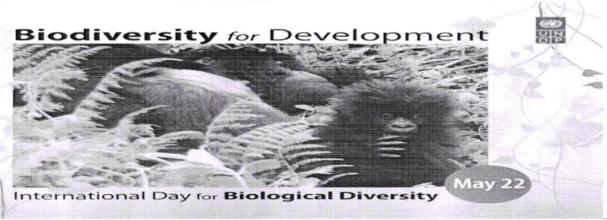
Dr. Kousik Bhattacharya

Department Of Mathematics

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#### CONCLUSION

Biodiversity is our life. If the Biodiversity got lost at this rate then in near future, the survival of human being will be threatened. So, it is our moral duty to conserve Biodiversity as well our Environment. Long-term maintenance of species and their management requires co-operative efforts across entire landscapes. Biodiversity should be dealt with at scale of habitats or ecosystems rather than at species level.





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PROJECT REPORT ON

**ENVIRONMENTAL STUDIES** 



**Title** 

**DEFORESTATION** 

Submitted by:

#### M GYANESWARI

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2024

#### Acknowledgement

When all good things come to an end, memories are left behind. In this regard, I feel obliged to all those who helped me to see this day.

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M GYANESWARI
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Session: 2022-2023



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#### TO WHOM IT MAY CONCERN

This is to certify that the project report entitled **Study of DEFORESTATION**, has carried out by **M GYANESWARI**, College Roll No: **22***13014*, Roll No: **1112121-220204**, Reg. No: **VU221210165** of **2022-2023**, a student of **Semester- II of B.A.** in **Hindi (H)** under my direct supervision and no part of this project work is not produced anywhere for evaluation. The project work is quite satisfactory and up to the standard for the partial fulfilment of B.A. degree in Hindi (H) under Vidyasagar University.

He/She has been submitted an 'Environmental Studies report' for evaluation.

I wish his/her all success.

Dr. Kousik Bhattacharya

Department Of Mathematics

Kharagpur College

#### **Conclusions**

Deforestation is very harmful to our community and to other communities around the world. We shall reject and avoid causing deforestation by recycling our paper and not throwing it away because then in the future more trees would need to be cut down. So if we just keep reusing paper it would be more sustainable to our environment. The local effect it has on our environment is that it decreases oxygen for inhalation while trees absorb carbon dioxide and produce oxygen for living organisms like human beings and wild life. You can save lives of living species. Recycle your paper and Say No to Deforestation!

# VIDYASAGAR UNIVERSITY

# Environmental studies

# KHARAGPUR COLLEGE

#### **TOPIC NAME:**

Tribal Laws and Customs for Protection of Tribal Rights in India

SUBMITTED BY

NAME: Nehal Ahirwal

ROLL-1112121NO-220212

**REGISTRATION NO -VU221210225** 

Under the supervision of

MR. Koushik Bhattacharya

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#### CERTIFICATE

This is to clarify that the project work on "Tribal laws and Customs for Protection of Tribal Rights in India" by "Nehal Ahirwal" student of Kharagpur college, Department of Hindi, Roll- 1112121 NO-220212, and Registration No VU221210225.

For the partial fulfilment of the required of Environment studies for the degree B.A (Honours) has been carried out under my supervision.

"Nehal Ahirwal" is sincere to her project and has upgrade her knowledge in the field.

This project, under with diligence and commitment, involved comprehensive research, analysis and presentation on the subject of "Tribal laws and Customs for Protection of Tribal Rights in India"

The matter and the information that have been presented in the dissertation work are quiet satisfactory and adequate for the fulfilment of **B.A Degree in Hindi (Honours)** as required by Vidyasagar university.

Date:	
Super	visor

signature of the

### **ACKNOWLEDGEMENT**

I would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the topic on "**Tribal laws and Customs for Protection of Tribal Rights in India**" This endeavour would not have been possible without the collective effort, dedication, and support of several individuals and organisations.

First and foremost, I extend my deepest thanks to **Mr. Koushik Bhattacharya**, Department of Mathematics for their guidance, mentorship, and invaluable insights throughout the course of this project. Your expertise and unwavering support have ben instrumental in shaping this work.

I would also like to acknowledge the contribution of my fellow project team members. Your commitment, teamwork, and collaborative spirit have been crucial in conducting research, gattering data and analysing information related to the "Tribal laws and Customs for Protection of Tribal Rights in IndiaRights, The Environment and Gender Equality".

Finally, I extend my gratitude to the authorities responsible for important the initiative for Global Environment . your tireless efforts and commitment to protecting our wildlife are commendable and serve as an inspiration for this project.

In conclusion, this project on the "Tribal laws and Customs for Protection of Tribal Rights in IndiaRights, The Environment and Gender Equality" would not have been possible without the collective effort and support of all those mentioned above. Your contribution have been helped to rasie awareness about the critical need to conserver out precious wildlife and uphold the principles of Global Environment. Thank you for being part of this important and endeavour.

Student Name Nehal Ahirwal

Nenolatriruo)

Roll no - 1112121

No - 220212

Registration No - VU221210225

Signature of Teacher

Session: 2022-23

(Department of Mathematics)



## **VIDYASAGAR UNIVESITY**

**AFFILITED TO** 



# KHARAGPUR COLLEGE ENVIROMENTAL STUDIES

**TOPIC – WILDLIFE CONSERVATION PROJECT: Project Snow Leopard.** 



SUBMITTED BY - RONIT KUMAR

VUROLL-1112121 NO- 220223 REG NO - VU221210312

**UNDER THE SUPERVISION OF** 

PROF- Kousik Bhatta Charlega.

#### KHARAGPUR COLLEGE

**KHARAGPUR** 



### **CERTIFICATE**

This is to certify that RONIT KUMAR (REG. NO: VU221210312, YEAR: 2022-23) of 2<sup>nd</sup> Semester B.A. Hons has done Project Work on Impact of "WILDLIFE CONSERVATION PROJECT: PROJECT SNOW LEOPARD".

Under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA
Department of Mathematics
KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I would like to express my special thanks and gratitude to my teacher who gave me the golden opportunity to do this wonderful project, which also helped me to do new things and I came to know about so many new things. I am really thankful to them.

I would like to express my gratitude towards my parents who helped me a lot in finalizing this project within the limited time frame.

My thanks and appreciation also goes to my friends in developing the project and to the people who have willingly helped me out with their abilities.

Ronlf Kuması.

Thank You

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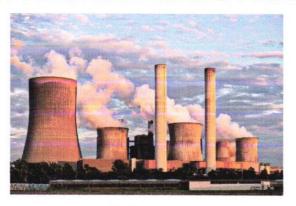
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PROJECT REPORT ON

#### **ENVIRONMENTAL STUDIES**



**Title** 

Air (Prevention and Control of Pollution) Act

Submitted by:

#### **B AMNEE**

College Roll: 2213005

University Roll No: 1112121-220194

Reg No: VU221210260

Under the supervision of

Dr. Kousik Bhattacharya Department Of Mathematics Kharagpur College

2024

#### Acknowledgement

When all good things come to an end, memories are left behind. In this regard, I feel obliged to all those who helped me to see this day.

To begin with I would like to express my deep sense of gratitude to Prof. Dr. Kousik Bhattacharya, my supervisor, for this valuable guidance, constant supervision, encouraging suggestion, motivation and pain taking efforts throughout the period of my project work of Environmental studies report.

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Department of Hindi
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College Roll no: 2313005
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Session: 2022-2023



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#### TO WHOM IT MAY CONCERN

This is to certify that the project report entitled **Study of Air (Prevention and Control of Pollution) Act**, has carried out by **B AMNEE**, College Roll No: **2213005**, Roll No: **1112121-220194**, Reg. No: **VU221210260** of **2022-2023**, a student of **I Semester of B.A.** in **Hindi (H)** under my direct supervision and no part of this project work is not produced anywhere for evaluation. The project work is quite satisfactory and up to the standard for the partial fulfilment of B.A. degree in Hindi (H) under Vidyasagar University.

He/She has been submitted an 'Environmental Studies report' for evaluation.

I wish his/her all success.

Dr. Kousik Bhattacharya

Department Of Mathematics

Kharagpur College

#### **Conclusions**

Various pollution control technologies and strategies are available to reduce air pollution.[28][29] At its most basic level, land-use planning is likely to involve zoning and transport infrastructure planning. In most developed countries, land-use planning is an important part of social policy, ensuring that land is used efficiently for the benefit of the wider economy and population, as well as to protect the environment.[262] Stringent environmental regulations, effective control technologies and shift towards the renewable source of energy also helping countries like China and India to reduce their sulfur dioxide pollution.[263]

Titanium dioxide has been researched for its ability to reduce air pollution. Ultraviolet light will release free electrons from material, thereby creating free radicals, which break up VOCs and NOx gases. One form is superhydrophilic.[264]

Pollution-eating nanoparticles placed near a busy road were shown to absorb toxic emission from around 20 cars each day.[



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PROJECT REPORT ON ENVIRONMENTAL STUDIES



**Title** 

TRADE AND THE ENVIRONMENT

Submitted by:

**ANJALI SAHA** 

College Roll: 2213003

University Roll No: 1112121-220192

Reg No: VU221210024

Under the supervision of

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#### Acknowledgement

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Date:- .

Anjali Saha

ANJALI SAHA Department of Hindi Kharagpur college College Roll no: 2313003 Vidyasagar University

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Roll No: 1112121-220192 Registration No.: VU221210024

Session: 2022-2023



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#### TO WHOM IT MAY CONCERN

This is to certify that the project report entitled **Study of TRADE AND THE ENVIRONMENT**, has carried out by **ANJALI SAHA**, College Roll No: **2213003**, Roll No: **1112121-220192**, Reg. No: **VU221210024** of **2022-2023**, a student of **Semester- II of B.A.** in **Hindi (H)** under my direct supervision and no part of this project work is not produced anywhere for evaluation. The project work is quite satisfactory and up to the standard for the partial fulfilment of B.A. degree in Hindi (H) under Vidyasagar University.

He/She has been submitted an 'Environmental Studies report' for evaluation.

I wish his/her all success.

Dr. Kousik Bhattacharya

Department Of Mathematics

Kharagpur College

#### **Conclusions**

In this study, I have identified three areas of regulation where conflicts may arise between trade and environmental protection. I have examined how the Court of Justice and the Supreme Court (Part 1) and the Community and the US federal legislatures (Part 2) have attempted to deal with such conflicts. The objective of this conclusion is (i) to highlight the main findings made in Parts 1 and 2; and (ii) to place the question of the relationship between trade and environmental protection in the broader context of the world trading system.

One of the central findings of this study is that the relationship between trade and environmental protection varies considerably depending on the area of environmental regulation in question. Even if equally designed to protect the environment, state regulations governing product standards, process standards and the movement and disposal of waste raise trade issues that are conceptually distinct. There is no one conflict between trade and environmental protection, but several kinds of conflict depending on which of these areas of environmental regulation is involved. Only the instruments to solve such conflicts (i.e., judicial and legislative intervention) remain constant. But, again, the usefulness of these instruments varies considerably depending on the area of environmental regulation in question.

In the area of product standards, the conflicts between trade and environmental protection have traditionally been solved through a mix of negative and positive harmonization.



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**AFFILITED TO** 



# KHARAGPUR COLLEGE ENVIROMENTAL STUDIES

**TOPIC – Protection of Tribal Rights.** 





SUBMITTED BY - BAIJNATH CHAUHAN

VUROLL-1112121 NO- 220195 REG NO – VU221210061

UNDER THE SUPERVISION OF

PROF- Kousik Bhalfacharya.

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This is to certify that BAIJNATH CHOUHAN (REG. NO: VU221210061, YEAR: 2022-23) of 2<sup>nd</sup> Semester B.A. Hons has done Project Work on Impact of "PROTECTION OF TRIBAL RIGHTS".

Under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA
Department of Mathematics
KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I would like to express my special thanks and gratitude to my teacher who gave me the golden opportunity to do this wonderful project, which also helped me to do new things and I came to know about so many new things. I am really thankful to them.

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Bairnalh chauhan

Thank You

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# VIDYASAGAR UNIVERSITY

# Environmental studies

# KHARAGPUR COLLEGE TOPIC NAME:

Human rights, the environment and gender equality

#### SUBMITTED BY

NAME: Radhe Mohan Gupta

**ROLL-** 1112121 **NO-** 220220

**REGISTRATION NO - VU221210283** 

Under the supervision of

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This is to clarify that the project work on "human Rights, The Environment and Gender Equality" by "Radhe Mohan Gupta" student of Kharagpur college, Department of Hindi, Roll- 1112121 NO-220220, and Registration No VU221210283.

For the partial fulfilment of the required of Environment studies for the degree B.A ( Honours ) has been carried out under my supervision.

Radhe Mohan Gupta is sincere to her project and has upgrade her knowledge in the field.

This project, under with diligence and commitment, involved comprehensive research, analysis and presentation on the subject of " "human Rights, The Environment and Gender Equality"

The matter and the information that have been presented in the dissertation work are quiet satisfactory and adequate for the fulfilment of **B.A Degree in Hindi (Honours)** as required by Vidyasagar university.

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Supervisor

signature of the

## **ACKNOWLEDGEMENT**

I would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the topic on "human Rights, The Environment and Gender Equality" This endeavour would not have been possible without the collective effort, dedication, and support of several individuals and organisations.

First and foremost, I extend my deepest thanks to **Mr. Koushik Bhattacharya**, Department of Mathematics for their guidance, mentorship, and invaluable insights throughout the course of this project. Your expertise and unwavering support have ben instrumental in shaping this work.

I would also like to acknowledge the contribution of my fellow project team members. Your commitment, teamwork, and collaborative spirit have been crucial in conducting research, gattering data and analysing information related to the "human Rights, The Environment and Gender Equality".

Finally, I extend my gratitude to the authorities responsible for important the initiative for Global Environment . your tireless efforts and commitment to protecting our wildlife are commendable and serve as an inspiration for this project.

In conclusion, this project on the "human Rights, The Environment and Gender Equality" would not have been possible without the collective effort and support of all those mentioned above. Your contribution have been helped to rasie awareness about the critical need to conserver out precious wildlife and uphold the principles of Global Environment. Thank you for being part of this important and endeayour.

Rathe Muchan Gupta
Student Name - Radhe Mohan Gupta

Roll no - 1112121

No - 220220

Registration No - VU221210283

Signature of Teacher

Session: 2022-23

(Department of Mathematics)



## **VIDYASAGAR UNIVESITY**

**AFFILITED TO** 



# KHARAGPUR COLLEGE

TOPIC-INTERNATIONAL AGREEMENTS: KYOTO PROTOCOLS



#### **SUBMITTED BY**

NAME - KEDARNATH DAS

**REG NO - VU221210147** 

**ROLL - 1112121** 

NO - 220200

**SUBJECT - EVS** 

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**KHARAGPUR** 



#### **CERTIFICATE**

This is to certify that KEDARNATH DAS (REG. NO: VU221210147, YEAR: 2022-23) of 2<sup>nd</sup> Semester B.A. Hons has done Project Work on Impact of "INTERNATIONAL AGREEMENTS: KYOTO PROTOCOLS".

Under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA
Department of Mathematics
KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I would like to express my special thanks and gratitude to my teacher who gave me the golden opportunity to do this wonderful project, which also helped me to do new things and I came to know about so many new things. I am really thankful to them.

I would like to express my gratitude towards my parents who helped me a lot in finalizing this project within the limited time frame.

My thanks and appreciation also goes to my friends in developing the project and to the people who have willingly helped me out with their abilities.

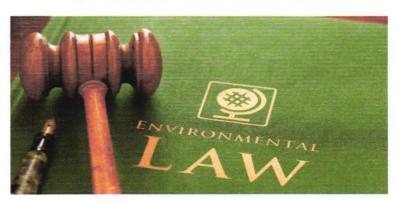
Thank You

Kedarnath Das

SAGAR UNIVERS



### KHARAGPUR COLLEGE **ENVIRONMENTAL STUDIES** FILED WORK ON **ENVIRONMENTAL LAW**



#### **SUBMITED BY**

NAVE **SHALINI SINGH** 

**REGITRATION NO** VU221210349

ROLL 1112121

NO. 220224

**SESSION** 2022-23

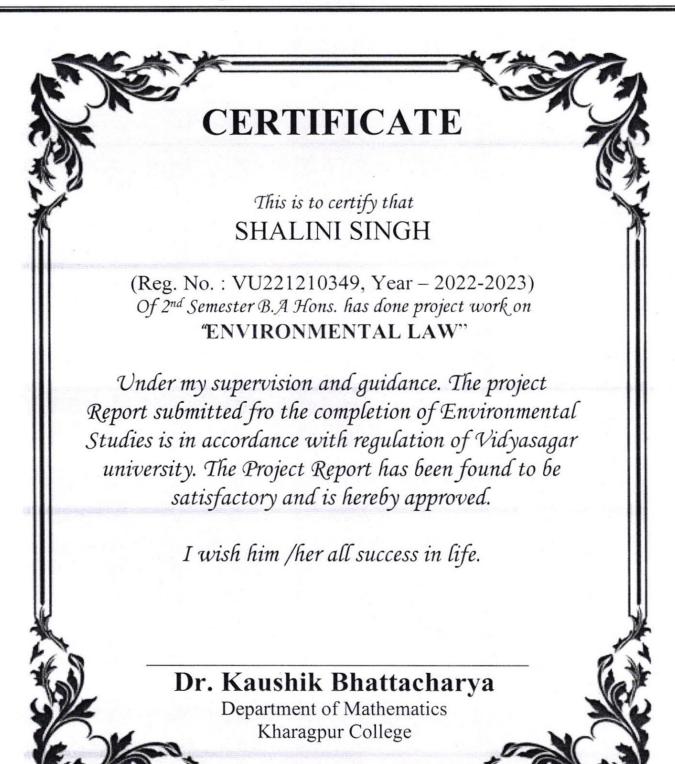
DR. KAUSHIK BHATTACHARYA DEPARTMENT OF MATHEMATICS



# KHARAGPUR COLLEGE KHARAGPUR

ESTD.: 1949

P.O.– Inda, Kharagpur, Municipality– Kharagpur, Sub-Division– Kharagpur, P.S.– Kharagpur (T), Dist.– Paschim Medinipur, West Bengal, PIN–721305.



### **ACKNOWLEDGEMENT**

I WOULD LIKE TO EXPRESS MY SPECIAL THANKS OF GRATITUDE TO OUR TEACHER MR. KOUSIK BHATTACHARYA AS WELL AS OUR PRINCIPAL: DR. BIDYUT SAMANTA WHO GAVE US THE OPPORTUNITY TO MAKE THIS PROJECT ON THE TOPIC: ENVIRONMENTAL LAW WHICH HELPS ME IN DOING A LOT OF RESEARCH AND I CAME TO KNOW ABOUT MANY NEW THINGS SO I AM VERY THANKFUL TO THEM.

SECONDLY, I WOULD LIKE TO THANK MY PARENTS AND FRIENDS WHO HELPED IN MAKING THIS PROJECT WITH A LIMITED FRAME OF THEM.

NAME: SHALINI SINGH

**ROLL NO: 2213041** 

REGISTRATION NO: VU221210349

SESSION: 2022 - 23

Department of Hindi Honurs Kharagpur Collage

Shaline Singh

# **CONTENTS**

- 1. ENVIRONMENTAL LAW ASSETS.
- 2. INTRODUCTION OF ENVIRONMENTAL LAW.
- 3. CAUSES OF ENVIRONMENTAL LAW.
- 4. AFFECTS OF ENVIRONMENTAL LAW . .
- 5. ENVIRONMENTAL LAW CONTROL.
- 6. TRAFFIC RELATED ENVIRONMENTAL LAW.



## Vidyasagar University

**Affiliated To** 



#### KHARAGPUR COLLEGE

**Environmental Studies** 

Filed Work On

Study Of Environmental Policy And Politics



Submitted By

Angish

Roll:- 1112121

No:- 220191

Registration No:- VU221210019 of 2022-2023

UNDER THE SUPERVISION OF

Prof. Kousik Bhattacharya (DEPT. OF MATHS)

KHARAGPUR COLLEGE



#### KHARAGPUR COLLEGE

#### **KHARAGPUR**

## **CERTIFICATE**

This is to certify that ANGISH [REG. NO: VU221210019, YEAR: 2022-23] of 2<sup>nd</sup> Semester B. A. Hons has done Project Work on Impact of "ENVIRONMENTAL POLICY AND POLITICS".

under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA

Department of Mathematics KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA, Faculty, department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR. BIDYUT SAMANTA respected principal of Kharagpur College.

I would like to express my thanks to my parents and their encouragements, helpent for the success and support time to time.

Place: KHARAGPUR

Date:

Am gish Signature of Candidate

### :Table of Contents:

- 1.Introduction
- 2. Environmental problems and politics
- ~ Environmental Challenges and Public Responses
- ~Environmental Policy and Politics
- ~Perspectives on Environmental Problems
- ~ The Role of Government and Politics
- 3. Judging the State of the Environment
- ~ Air Quality
- ~Indoor Air Quality
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- ~Toxic Chemicals and Hazardous Wastes
- 4. Making Envormental Policy
- ~The Policy Process Model
- ~Patterns in Envormental Policymaking
- ~ Characteristics of U.S. Government and Politics
- 5. The Evolution of Environmental Policy and Politics
- ~Nature Resources and Environmental policies in history perspective
- ~The Modern Environmental Movement and Policy Achievements
- ~ Political Reaction to Environmentalism
- ~ setting Environmental Standards
- 6. References
- 7. Conclusion

# VIDYASAGAR UNIVERSITY

# PROJECT ON **ENVIRONMENTAL STUDIES**

# KHARAGPUR COLLEGE



**Topic Name: International Agreements Montreal Protocols** 

#### Submitted By:

KAJAL KUMARI

Programe: B.A Hons.

Semester: 2<sup>nd</sup>

Registration No: VU22120139 of 2022-23

VU Roll No: 1112121-220199

College Roll No: 2213009



# KHARAGPUR COLLEGE KHARAGPUR

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P.O.– Inda, Kharagpur, Municipality– Kharagpur, Sub-Division– Kharagpur, P.S.– Kharagpur (T), Dist.– Paschim Medinipur, West Bengal, PIN–721305.

# **CERTIFICATE**

This is to certify that

KAJAL KUMARI

(REG. NO.: VU22120139, YEAR – 2022-2023)

Of 2<sup>nd</sup> Semester B.A Hons. has done project work

"International Agreements: Montreal Protocols"

Under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with regulation of Vidyasagar university. The Project Report has been found to be satisfactory and is hereby approved.

I wish him /her all success in life.

Dr. Kaushik Bhattacharya Department of Mathematics Kharagpur College Acknowledgement

I like to express my deep sense of gratitude to Prof. Kaushik

Bhattacharya, Faculty department of Mathematics, Kharagpur College for

his constant encouragement, guidance and instructions.

I also very thankful to Dr. Bidyut Samanta respected principal of

Kharagpur College.

I would like to express my thanks to my parents for

encouragements, helped for the success and support time to time.

Place: Kharagpur

Date:

Kafal Kumari Signature of the candidate

#### : Table of Contents:

- 1. Introduction
- ~ Significance of the Montreal Protocol
- ~ Date of Signing: September 16, 1987
- 2. Historical Context
- ~Emergence of Concerns over Ozone Depletion
- ~Scientific Research on Ozone- Depleting Substances (ODS)
- 3. Key Provisions
- ~Phase-Out Schedule
- ~Substance Control Measures
- ~Technology Transfer and Financial Assistance
- 4. Success and Impact
- ~Progress in Ozone Layer Recovery
- ~Contribution to Climate Change Mitigation
- ~Health and Environmental Benefits
- 5. Challenges and Future Outlook
- ~Compliance Issues
- ~Emerging ODS and Illegal Trade
- ~Addressing Environmental Impact of Substitute Substances
- 6. Conclusion
- ~Montreal Protocol as a Model for Global Environmental Cooperation
- ~Importance of Multilateralism and Collective Action
- 7. Success and Impact:
- ~Progress in Ozone Layer Recovery: Discussing the positive outcomes and progress achieved in the recovery of the ozone layer as a result of the Montreal Protocol's implementation.
- ~Contribution to Climate Change Mitigation: Highlighting how the phase-out of ozone-depleting substances has also contributed to mitigating climate change, as many of these substances are potent greenhouse gases.
- ~Health and Environmental Benefits: Enumerating the health and environmental benefits resulting from the protection of the ozone layer, such as the prevention of skin cancer, cataracts, and the preservation of ecosystems.
- 8. References
- 9. Conclusion



# PROJECT ON ENVIRONMENTAL STUDIES

#### KHARAGPUR COLLEGE



#### : TOPIC NAME:

#### **ECOLOGY**

#### : SUBMITTED BY:

KHUSHI VISHWAKARMA PROGRAMME : B.A HONS

SEMESTER: 2ND

REGISTRATION NO.: VU221210151 of 2022 - 2023

VU ROLL NO. : 1112121 - 220202 COLLEGE ROLL NO. : 2213012



#### KHARAGPUR COLLEGE

#### **KHARAGPUR**

## **CERTIFICATE**

This is to certify that KHUSHI VISHWAKARMA [REG. NO: VU221210151, YEAR: 2022-23] of 2<sup>nd</sup> Semester B. A. Hons has done Project Work on Impact of "ECOLOGICAL".

under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA

Department of Mathematics
KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA, Faculty, department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR. BIDYUT SAMANTA respected principal of Kharagpur College.

I would like to express my thanks to my parents and their encouragements, helpent for the success and support time to time.

Place: KHARAGPUR

Date:

Khushi wishwakayma Signature of Candidate

#### **Table of Contents**

- 1. Introduction
- 2. Objectives of Ecology
- 3. Characteristic of Ecosystem
- 4. Concept of Ecosystem
- 5. Classification of Ecology
- 6. Components of Ecosystem
- 7. Biotic structural components of ecosystem
- 8. Abiotic components of ecosystem
- 9. Functional component of ecosystem
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- 11. Types of food chain
- 12. Food web-1 & Food web-2
- 13. Food web in grassland
- 14. Bio-geo chemical cycle
- 15. References
- 16. Conclusion

# **VIDYASAGAR UNIVERSITY**

# PROJECT ON ENVIRONMENTAL STUDIES

# KHARAGPUR COLLEGE



# Topic Name: ENVIRONMENTAL JUSTICE

#### **Submitted By:**

MUSKAN SONKAR

Programe: B.A Hons.

Semester: 2<sup>nd</sup>

Registration No: VU221210206 of 2022-23

VU Roll No: 1112121-220207

College Roll No: 2213018



# KHARAGPUR COLLEGE KHARAGPUR

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# CERTIFICATE

This is to certify that
MUSKAN SONKAR
(REG. NO.: VU221210206, YEAR – 2022-2023)
Of 2<sup>nd</sup> Semester B.A Hons. has done project work

#### "ENVIRONMENTAL JUSTICE"

Under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with regulation of Vidyasagar university. The Project Report has been found to be satisfactory and is hereby approved.

I wish him /her all success in life.

Dr. Kaushik Bhattacharya Department of Mathematics Kharagpur College Acknowledgement

I like to express my deep sense of gratitude to Prof. Kaushik

Bhattacharya, Faculty department of Mathematics, Kharagpur College for

his constant encouragement, guidance and instructions.

I also very thankful to Dr. Bidyut Samanta respected principal of

Kharagpur College.

I would like to express my thanks to my parents for

encouragements, helped for the success and support time to time.

Place: Kharagpur

Date:

Muskan Sonkal Signature of the candidate

### : Table of Contents:

- 1. INTRODUCTION
- 2. THE RISE OF ENVIRONMENTAL JUSTICE STUDIES
- 3. DISTANCE, COMMUNITY PERCEPTIONS, AND IMPROVING METHODOLOGIES.
- 3.1. Race versus Class
- 3.2. The "Chicken and the Egg" Debate
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- 7. CONCLUSION: NEW DIRECTIONS FOR ENVIRONMENTAL JUSTICE...
- 8. Toxic legacies and environmental justice
- 9. Recognition and environmental justice
- 10. Biodiversity cisis, conflict and justice
- 11. Climate justice
- 12. Energy justice
- 13. References
- 14. Conclusion



### PROJECT ON **ENVIRONMENTAL STUDIES**

#### KHARAGPUR COLLEGE



#### : TOPIC NAME:

#### CONSTITUTIONAL GUARANTEE WITH RESPECT TO TRIBAL RIGHTS

#### : SUBMITTED BY:

NEHA KUMARI VERMA PROGRAMME: B.A HONS

SEMESTER: 2ND

REGISTRATION NO.: VU221210224 of 2022 - 2023

VU ROLL NO.: 1112121 - 220211 COLLEGE ROLL NO.: 2213038



#### KHARAGPUR COLLEGE

#### KHARAGPUR

### CERTIFICATE

This is to certify that NEHA KUMARI VERMA [REG. NO: VU221210224, YEAR: 2022-23] of 2nd Semester B. A. Hons has done Project Work on Impact of "CONSTITUTIONAL GUARANTEE WITH RESPECT TO TRIBAL RIGHTS ".

under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA

Department of Mathematics KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA, Faculty, department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR. BIDYUT SAMANTA respected principal of Kharagpur College.

I would like to express my thanks to my parents and their encouragements, helpent for the success and support time to time.

Place: KHARAGPUR

Date:

Signature of Candidate

#### Table of contents:

#### I. Introduction

- A. Brief overview of tribal rights in the United States
- B. Importance of constitutional guarantees in protecting tribal sovereignty

#### **II. Historical Context**

- A. pre-constitutional era: Indigenous populations and their governance systems
- B. Treaties and agreements with tribes
- C. The impact of colonialism on tribal communities

#### III. Constitutional Foundations

A. Examination of relevant constitutional clauses and amendments

#### IV. Land Rights and Sovereignty

- A. Analysis of the legal framework surrounding tribal land rights
- B. Historical cases and Supreme Court decisions influencing tribal sovereignty

#### V. Treaty Rights

- A. Examination of treaties as a constitutional basis for tribal rights
- B. Contemporary challenges to the recognition of treaty rights

#### VI. The Indian Commerce Clause

- A. Historical context and purpose
- B. Impact on tribal economic development and regulation

#### VII. Conclusion

C. Economic development challenges and opportunities

#### VIII. Reference



#### VIDYASAGAR UNIVERSITY

# PROJECT ON ENVIRONMENTAL STUDIES

#### KHARAGPUR COLLEGE



#### : TOPIC NAME:

#### **ENVIRONMENTAL CRIMINALITY**

#### : SUBMITTED BY:

AMRITA YADAV

PROGRAMME: B.A HONS

SEMESTER: 2ND

REGISTRATION NO.: VU221210015 of 2022 - 2023

VU ROLL NO. : 1112121 - 220190 COLLEGE ROLL NO. : 2213001



#### KHARAGPUR COLLEGE

#### **KHARAGPUR**

# <u>CERTIFICATE</u>

This is to certify that AMRITA YADAV [REG. NO: VU221210015, YEAR: 2022-23] of 2<sup>nd</sup> Semester B. A. Hons has done Project Work on Impact of "ENVIRONMENTAL CRIMINALITY".

under my supervision and guidance. The project Report submitted for the completion of Environmental Studies is in accordance with the regulation of Vidyasagar University. The Project Report has been found to be satisfactory and is hereby approved. I wish him/her all success in life.

PROF. KOUSIK BHATTACHARYA

Department of Mathematics KHARAGPUR COLLEGE

#### **ACKNOWLEDGEMENT**

I like to express my deep sense of gratitude to PROF. KOUSIK BHATTACHARYA, Faculty, department of Mathematics, Kharagpur College, for his constant encouragement, guidance and instructions.

I also very thankful to DR. BIDYUT SAMANTA respected principal of Kharagpur College.

I would like to express my thanks to my parents and their encouragements, helpent for the success and support time to time.

Place: KHARAGPUR

Date:

Signature of Candidate

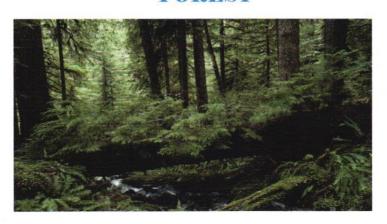
#### :Table of Contents:

- 1. Introduction
- 1.1 The different types of environmental criminality in developing countries and its various impacts
  - 1.2 Wildlife, forestry and fishery crime
  - 1.3 Illegal mining
  - 1.4 Waste and pollution
- Shortcomings in developing countries as regards environmental rule of law
  - 2.1 Legislation and its implementation
  - 2.2 Information collection, management and use
  - 2.3 Financial and human capacity
  - 2.4 Enforcement
  - 2.5 Corporate governance
- 3. Entry points, best practices and lessons learned to address environmental criminality
  - 3.1 Colombia and wildlife crime
  - 3.2 Indonesia and forest crime
  - 3.3 Ghana and fishery crime and waste
  - 3.4 Democratic Republic of Congo: mining and pollution
- 4. Recommendation
  - 4.1 Policy Frameworks
  - 4.2 Legislative Frameworks and Implementation
  - 4.3 Prevention
  - 4.4 Enforcement
  - 4.5 Cooperation and Communication
- 5. Reference
- 6. Conclusion

ASAGAR UNIVERSITATION OF THE SECOND S



#### KHARAGPUR COLLEGE **ENVIRONMENTAL STUDIES** FILED WORK ON FOREST



#### **SUBMITED BY**

NAME **NAZ PARVEEN** 

**REGITRATION NO** VU221210222

1112121 ROLL

NO. 220210

**SESSION** 2022-23

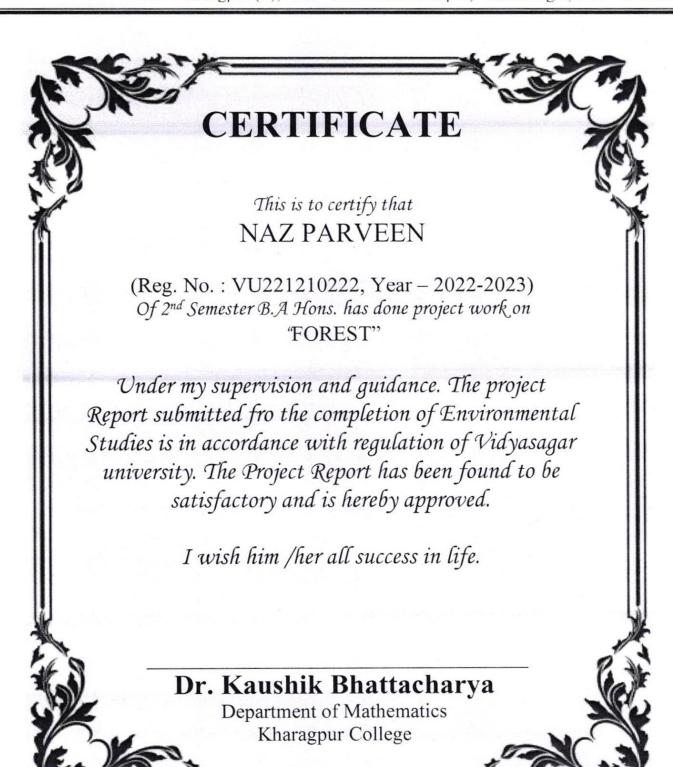
DR. KAUSHIK BHATTACHARYA **DEPARTMENT OF MATHEMATICS** 



# KHARAGPUR COLLEGE KHARAGPUR

ESTD.: 1949

P.O.– Inda, Kharagpur, Municipality– Kharagpur, Sub-Division– Kharagpur, P.S.– Kharagpur (T), Dist.– Paschim Medinipur, West Bengal, PIN–721305.



### Acknowledgement

I like to express my deep sense of gratitude to Prof. Kaushik Bhattacharya, Faculty department of Mathematics, Kharagpur College for his constant encouragement, guidance and instructions.

I also very thankful to Dr. Bidyut Samanta respected principal of Kharagpur College.

I would like to express my thanks to my parents for their encouragements, helped for the success and support time to time.

Place: Kharagpur

Date:

Naz Parveen Signature of the candidate

#### **CONTENTS**

- ✓ Environmental Assets-Forests
- ✓ Introduction
- ✓ Ecological Role of Forests
- ✓ Issues and Threats to Forests
- ✓ Trading in exotic birds.
- ✓ Components of the forest
- ✓ The importance of Decomposers
- ✓ Forest Management Planning
- ✓ Pupose of Forest management planning
- ✓ 2019 Forest survey Data of India
- ✓ Salient findings
- ✓ Forest and tree covers of India in 2019
- ✓ Survey of trees and forest cover in Kharagpur block as reference to the data
- ✓ Provided by Hijli Ecological forest and park
- ✓ Birds and animals found in the forest of Kharagpur
- ✓ Animal found in Kharagpur
- ✓ Introduction to Forest Ecology
- ✓ What is ecology?
- ✓ The sub disciplines of ecology
- ✓ Conclusion
- ✓ Reference
- ✓ Acknowledgement

# VIDYASAGAR UNIVERSITY



#### Affilited to

# KHARAGPUR COLLEGE

#### **Environmental Studies**

Filed work on

# " INITIATIVE OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS"



**Submitted By:** 

lame: VANSHITA LAL

Roll:1112121 No: 220229

Registration No: VU221210477

Under the Supervision of,

Mr. Koushik Bhattacharya

# KHARAGPUR COLLEGE

Inda, Kharagpur, Paschim Medinipur Estd – 1949

### **CERTIFICATE**

This is to clarify that the project work on "INITIATIVES OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS" by VANSHITA LAL, student of Kharagpur College, Department of Hindi, Roll- 1112121 No- 220229, and Registration No- VU221210477.

For the partial fulfilment of the requirement of Environmental Studies for the degree B.A (Honours) has been carried out under my supervision.

VANSHITA LAL is sincere to her project and has upgraded her knowledge in the field.

This project, undertaken with diligence and commitment, involved comprehensive research, analysis and presentation on the subject of INITIATIVES OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS ".

The matter and the information that have been presented in the dissertation work are quiet satisfactory and adequate for the fulfilment of B.A degree in HINDI (Honours) as required by Vidyasagar University.

Date:

Signature of the Supervisor (Department of Mathematics)

# **ACKNOWLEDGEMENT**

I would like to express my heartfelt gratitude and appreciation to all those who have contributed to the successful completion of this project on the topic on "INITIATIVES OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS". This endeavour would not have been possible without the collective effort, dedication, and support of several individuals and organisations.

First and foremost, I extend my deepest thanks to Mr. Koushik Bhattacharya, Department of Mathematics for their guidance, mentorship, and invaluable insights throughout the course of this project. Your expertise and unwavering support have been instrumental in shaping this work.

I would also like to acknowledge the contributions of my fellow project team members. Your commitment, teamwork, and collaborative spirit have been crucial in conducting research, gattering data and analysing information related to the "INITIATIVES OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS".

Finally, I extend my gratitude to the authorities responsible for implementing the initiatives for Human Wildlife Conflicts, as well as the individuals and organisation dedicated to the preservation of our Wildlife and Habitats. Your tireless efforts and commitment to protecting our wildlife are commendable and serve as an inspiration for this project.

In conclusion, this project on the "INITIATIVES OF GOVERNMENT FOR HUMAN WILDLIFE CONFLICTS", would not have been possible without the collective effort and support of all those mentioned above. Your contributions have helped to raise awareness about the critical need to conserve our precious wildlife and uphold the principles of Human Wildlife. Thank you for being part of this important and endeavour.

Vanshita Lal

Student Name: VANSHITA LAL Roll: 1112121 No: 220229

Registration No: VU221210477

Session: 2022-23

Signature of Teacher (Department of Mathematics)



- **\* INTRODUCTION**
- **❖ BACKGROUD TO HUMAN WILDLIFE CONFLICTS**
- ❖ INSTITUTIONAL ARRANGEMENTS IN HUMAN WILDLIFE CONFLICT
- **\* LESSONS ON REDUCING HUMAN WILDLIFE CONFLICT**
- ❖ COUNTRY SPECIFIC AND LOCAL LEVEL PROBLEM ANIMAL CONTROL OPTIONS
- **\* TAKING ACTIONS AND EVALUATING EFFECTIVENESS**
- ❖ INITIATIVE TAKEN BY THE GOVERNMENT FOR HUMAN WILDLIFE CONFLICT
- CONCLUSION