

GIRLS

Water pollution

2021-2022

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RANIGANT

COLLEGE



Raniganj Girls' College

Course Name: Environment Studies

Course Code: AEE101

Topic of the project: Water pollution

A Project Report

Submitted by Semester-I students (Academic Year 2021-22)

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CERTIFICATE

This is to certify that this project titled “Water pollution” submitted by the students for the award of degree of B.A. Honours/ Program is a bonafide record of work carried out under my guidance and supervision.

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Mousmita Pal

Date: 18.03.2022

Assistant Professor, Department of Zoology

Signature of the supervisor with designation and department



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REGISTRATION CERTIFICATE

This is to certify that SHAMA PERWEEN

Son/Daughter of LT MD NASIM

of RANIGANJ GIRLS' COLLEGE

is registered as a student of this University,

His/Her registration number is 113211210215 of 2021-22



89/3/22

Registrar

Water Pollution



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	Project on water pollution

Introduction

Water pollution :-

We all know water is crucial for life. We trash it anyway. Some 80 percent of the world's wastewater is dumped - largely untreated back into the environment, polluting rivers, lakes, and oceans. This widespread problem of water pollution is jeopardizing our health. Unsafe water kills more people each year than war and all other forms of violence combined. Meanwhile, our drinkable water sources are finite: less than 1% of the earth's freshwater is actually available. The challenges will only increase by 2050.

The Raniganj coalfield lies in the easternmost part of the Damodar valley coalfield and is bounded by $23^{\circ}25'N$ to $23^{\circ}50'N$ latitude and $86^{\circ}38'E$

the 1 / inside part

Water Pollution

Water pollution



Longitude.

The Burdwan, Birbhum, Bankura, and Purulia districts in West Bengal and Dhanbad district in Jharkhand. A network of the country (Fig. 1)

The topography of the Raniganj coalfield is gently undulating and the elevations are the Panchet (643m) and Biharimath hills (451m). The drainage pattern is mainly dendritic to subdendritic in nature (Srivastava and Mitra 1995) and most mines of this

coalfield lies between two rivers, the Damodar in a qualitative assessment of mine waters from the Raniganj coalfield. 77 mine water samples analyzed, and irrigation users. water pollution occurs when harmful substances.

Definition

Water pollution :-

Water pollution is the release of substances into bodies of water that makes unsafe for human use and disrupts aquatic ecosystems. Water pollution can be caused by a plethora of different contaminants, including toxic waste, petroleum, and disease causing microorganisms. Natural phenomena such as volcanoes, algae blooms, storms, and earthquakes also cause major changes in water quality and the ecological status of water.

Definitional

Water Pollution

Water pollution is the release of a substance into water bodies.



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Types of Water Pollution

Water contamination is categorized based on the source or the nature of the water body it affects. Some of the most common pollution types are:

A. Surface water pollution

Surface water includes water that is found naturally on the earth's surface. They include lagoons, rivers, oceans, and lakes. Contamination of such pollutants. It can be accidental, such as oil spills in the ocean or intentional, like industries eliminating their wastes into rivers or sea.

B. Groundwater pollution

It occurs when the hazardous chemicals and particles applied on the surface by humans seep into the ground by rainwater.

Types of Water Pollution

Water contamination is categorized based on the source or the nature of the water body it affects. Some of the most common



A. Point

1. Point Source Pollution

This type of pollution is caused by a single, identifiable source that discharges pollutants directly into the water body. Examples include a factory, a sewage treatment plant, or a ship. The pollutants are concentrated in a specific area, making them easier to trace and control.

The contaminants pollute underground water features such as underground rivers and waterbeds. As a cause of this type of pollution is the use of pesticides and Fertiliser on farms.

C. Marine pollution

Marine pollution is a combination of chemicals and trash, most of which comes from land sources and is washed or blown into the ocean. This pollution results in damage to the environment, to the health of all organisms, and to economic structures worldwide.

Large gyres (vortexes) in the oceans trap floating plastic debris. plastic debris can absorb toxic chemicals from ocean pollution, potentially poisoning any creature that eats it. Many of these long-lasting pieces end up in the stomachs of marine birds and animals. This results in obstruction of digestive pathways, which leads

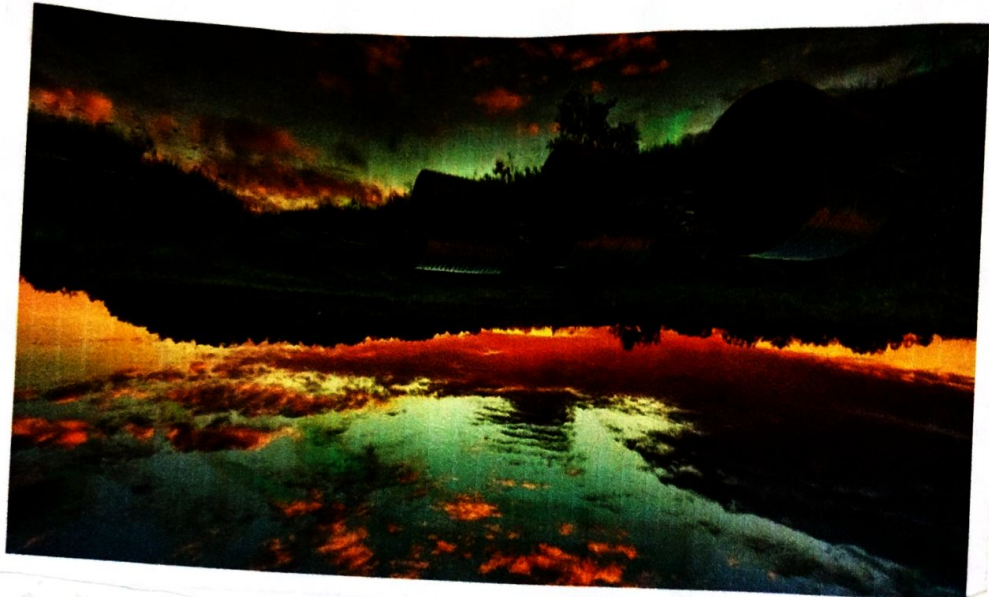
Sources of Water Pollution

1.) point sources :- point sources water pollution refers to contaminants that enter a waterway from a single, identifiable source, such as pipe or ditch. Examples of sources in this category, include discharges from a sewage treatment plant, a factory or a city storm drain.

2.) Non-point sources :- Nonpoint source pollution refers to diffuse contamination often the cumulative effect of small amounts of contaminants gathered from fertilized agricultural lands.

Geography of the Water Pollution

1) Point sources - point sources are pollution
subject to control through the water quality
act of 1972. It is a source of water pollution
from a single identifiable point.

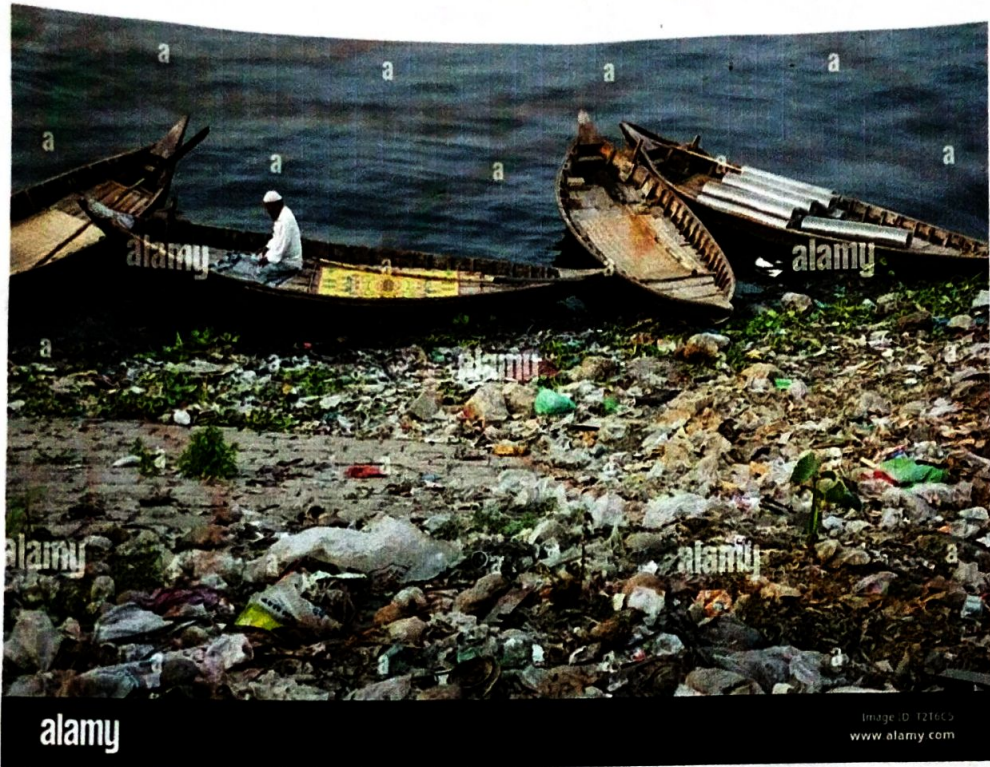


2) Non-point sources - non-point sources are
difficult to control through the water quality
act of 1972. It is a source of water pollution
from a diffuse area.

Causes of Water pollution

1. Industrial waste :- Industries produce a tremendous amount of waste, which contains toxic chemicals and pollutants, causing air pollution and damage to our environment and us. They contain harmful chemicals, including lead, mercury, sulfur, nitrates, asbestos, and many others.

2. Sewage and wastewater :- Harmful chemicals, bacteria and pathogens can be found in sewage and wastewater even when it's been treated. Sewage and wastewater from each household is released into the sea with fresh water. The pathogens and bacteria found in that wastewater breed disease, and therefore are a cause of health-related issues in humans and animals in the sea.



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3. The Burning of fossil fuels :- Fossil fuels like coal and oil, when burnt, produce a substantial amount of ash in the atmosphere. The particles which contain amount of ash toxic chemicals when mixed with water vapor result in acid rains which results in global warming.

4. Global warming :- An increase in the earth's temperature results in global warming due to the greenhouse effect. It increases the water species, which later in a later pollution.

Effect of Water pollution

1. Effects on Human Being: - Life is a cycle, and humanity's irresponsible behaviour often comes back to haunt it. We all drink water that comes from a source: this may be a lake or local river. In countries that have poor screening and purification practices, people often get water borne disease outbreaks, such as cholera and tuberculosis. Every year, there are an estimated 3-5 million cholera cases and 100,000-120,000 deaths due to cholera. In 2019 it is stated that 785 million people lack access to essential drinking water.

2. Food chain Disruption: - pollution disrupts the food chain by moving the toxins from one level in the chain to higher levels. In some cases, pollution can wipe out an entire part of the food chain. In case the predator dies or death.

EFFECT OF POLLUTION

1. Effects on human health: The air is polluted and harmful to health. The water is polluted and harmful to health. The soil is polluted and harmful to health. The effects of pollution are far-reaching and may be avoided only by strict control.



2. Effects on the environment: The environment is polluted and harmful to health. The air is polluted and harmful to health. The water is polluted and harmful to health. The soil is polluted and harmful to health. The effects of pollution are far-reaching and may be avoided only by strict control.

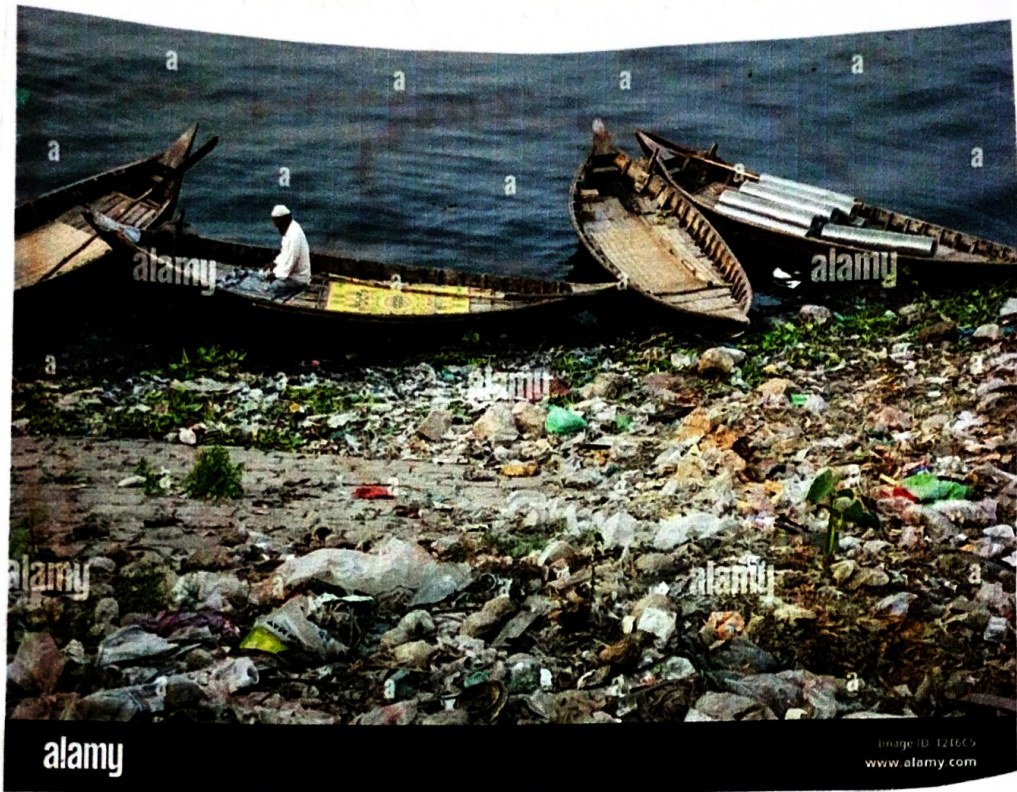
Control or Solutions

1. Use less plastic :- It is very difficult to break down plastic after it produced. Much of the plastic we consume ends up in the world's water supply, where few plastic items as possible, you are helping the environment. plastic waste also spreads decay in the water supply.

2. Reuse items :- Whenever you buy something that is not recyclable, such as plastic, it is better to reuse this item as many times as possible. This habit limits your consumption and means less of these product will end up in the world's rivers, lake and oceans.

3. cleaning chemicals :- Similar to oil, cleaning chemicals are hazardous when they enter the water supply. If you are emptying containers of household cleaning supplies, do it in the trash can, not in the sink.

Control on Pollution



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Conclusion

Water is an essential natural resource for the life of all living things. Any irresponsible behaviour in the part of humanity affects all the other beneficiaries.

Consequently, there is a need to protect water bodies from deliberate pollution.

Human contribution to water pollution is enormous by way of defecating; dumping of refuse, industrial wastes and washing of clothes etc. (Egilabor, 1998) apparently environmental education is of immense importance to use particularly in schools and should have a place in the school curriculum. In this way they will be less inclined to pollute our water.

Awareness is the most important thing, public awareness can lead to the evolution

Plan of work

After deciding on the composition of the project. I discussed the matter with our college teacher Moumita pal mam then we took various plan for the implementation of the project.

- 1) With the help of textbook, my friend planned various phase of the project.
- 2) I have tried to gather information's about the reasons why the level of water pollution has increased at some point.
- 3) Along with the bad aspects of pollution during the implementation of the project, I have also discussed prevention. So that anyone can gain some overall knowledge from this project.

Data Collection

There are so many sources of data collection techniques but specially there are two types to collect the data.

(i) primary Data

(ii) Secondary Data

I enlisted the help my college teachers and friends in collecting primary data. For this purpose, secondary data will be obtained from various published and unpublished record, books and journals. Data collection is especially important in implementing my project, notice of the project is possible without data. I have my primary and secondary data from a variety of different places. I took the help of Internet, my sister class teachers.

Limitations of the study

There are so many limitations in front of me to do this project. I have encountered a number of difficulties, especially collecting information's. we have not been able to work in the field for the covid 19 virus.

The limitations are - lack of time, lack of information etc.

Acknowledgement

I would like to express my gratitude towards Moumita pal mam for guiding me throughout the project. I also feel thankful and express my kind gratitude towards our principal chabbe de mam for allowing me to conduct water pollution project. The mentioned project was done under the supervision of Momimta pal mam. I thank all participants for their positive support and guidance.

I feel thankful to the college staff for giving me such a big opportunity. I believe I will enroll in more such events in the coming future. I ensure that this project was done by me and is not copied.

