



Raniganj Girl's College

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Title: Water pollution in
Raniganj City

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Raniganj Girls' College

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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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Place: Raniganj



Date: 18.03.2022

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Signature of the supervisor with designation and department



Kazi Nazrul University

1986年1月1日，中国科学院植物研究所与国家林业局合作，在长白山建立“长白山自然保护区”，保护区面积为19万公顷。



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Raniganj City Water pollution

- What is water Pollution?

What water Pollution occurs when harmful substance - often chemicals or microorganisms - contaminate a stream, river, lake, ocean, aquifer or other body of water, degrading water quality and rendering it toxic to humans and the environment.

Introduction

water is uniquely vulnerable to pollution known as a "universal solvent", water is able to dissolve more substance than any other liquid on earth.

It's the reason we have Kool-Aid and brilliant blue waterfalls. It's also why water is so easily polluted, toxic substance from farms, towns, and factories steadily dissolve into and mix with it causing water pollution.

The open cast coal extraction method is one of the best and appropriate in the mining industries of the India resulting into a void or pit which is eventually filled up by surface.

Impact of Water pollution

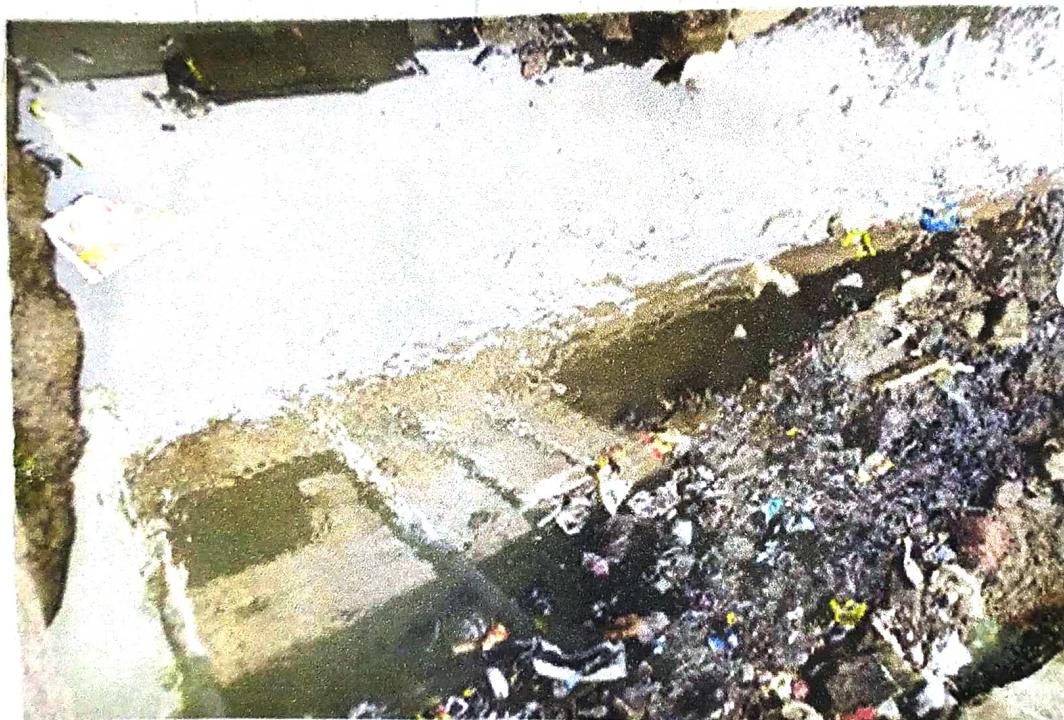
Human infections diseases are among the most serious effects of water pollution especially in developing countries where sanitation may be inadequate or non-existent. Water born diseases occur when parasites or other disease-causing microorganisms are transmitted via contaminated water. Particularly water contaminated by pathogens originating from excreta, these include typhoid, intestinal parasites, and most of the enteric and diarrhoeal diseases caused by bacteria, parasites, and viruses. Among the most enteric and parasitic diseases causes are amoebiasis, giardiasis, and viruses like hookworm, whistler.

beased diseases are somewhat similar to water warm borne diseases but are not typically an effect of water pollution they come from infectious agents that naturally spend part of their life cycles in water human can become infected when they drink or come in contact with the water that or come in contact with the water that serves as home to these organisms.

The toxins found in brown tide algae are strong enough that fishers can get skin lesions from exposures and nearby brown tide.

Gando: 4

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2. Señal de la costa de la isla de Gando.



Señal de la costa de la isla de Gando

Causes of Water pollution

Causes of water pollution can be classified under two broad categories. Point Source which occurs when harmful substances are emitted directly into a body of water and 'nonpoint source' which delivers pollution indirectly through transport or environment change an example directly into a river an example of a point source of water pollution is a pipe from an industrial facility discharging effluent directly into a river

Causes of water pollution of water could be pesticides and fertilizers

which run-off from fields into local streams and rivers. Many causes of pollution, including sewage, manure, and chemical fertilizers, contain "nutrients" such as nitrates and phosphates. Deposition of atmospheric nitrogen also causes nutrient-type water pollution.

In excess levels, nutrients over-stimulate the growth of aquatic plants and algae. Excessive growth of these types of organisms clog our waterways and blocks light to deeper waters while the organisms are alive. When the organisms die, they use up dissolved oxygen as they decompose.

8:04 AM



Raniganj city water pollution

Study area

Raniganj coalfield is the in the of coal mining in the country. Area of Raniganj Coalfield is 1536 km^2 Spredling over Bardhaman, Birbhum, Bankura and Purulia Districts. Head of Raniganj coal field is however in Burdwan District- bounded by Ajay River in north and Damodar River in South on the basic of geographic distribution and use pattern, 10 pit lakes were selected for studying the Physico chemical properties of their water in Premonsoon, monsoon and Post-monsoon comprising the three principal seasons of a year.

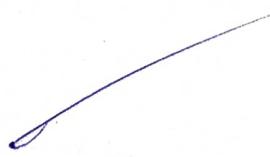
Water Sample Analysis

Water samples were collected from opitlakes in Premon-soon, monsoon and post - monsoon seasons during 2014-2015 using Standard Protocols and guidelines the value of each Parameter was expressed as mean with standard deviations in the results.

tests for Physicochemical Parameters of water samples were performed by following standard methods given by American Public Health Association and Black (1965)

Discussions

Variation of physicochemical Parameters of ten Pithakes of Raniganj Found with their mean value; similarities were also reported and that key influencing parameters Hardness, chloride and nitrate Nitrogen content of Pithake water Parameters are positively correlated that indicate their effect on water quality.



Conclusion

The Based on the result of this present studies of the Pittakes of Raniganj Rajbari it can be concluded that water quality. It revealed that all Pittakes change with seasonal variation Such change were found in ph. conductivity Alkalinity - Hardness chloride, Nitrate nitrogen and phosphate phosphorous also Major factors indicate that Pittake water quality have the potentiality to him - Prove and restore itsel with the course of time.

Certificate

This is to certify that Content
of this Project entitled "Water Pollution."
by Jyoti Kumari Shaw is the bona fide
work of him Submitted to "Raniganj Hiral's
College for consideration in Partial Fulfi-
llment of the requirement of Kazi
Nazrul University", Asansol for the award
for consideration under the guidance of
our EVS Teacher and have been completed
it successfully.

Date:-

Teacher's Signature.

A handwritten signature in blue ink, appearing to read "Jyoti Shaw".