Raniganj Girl's Collage

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Honours / Program: Honours
Semester: 1st Sem.
Roll no: 540 Session: 2021 - 22

EVS Project

Title: Water pollution in Raniganj City

8/3/22

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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Place: Raniganj

Mousumita Pal

Date: 18.03.2022

Assistant Professor, Department of Zoology

Signature of the supervisor with designation and department

Kazi Nazrul University

Asansol West Bengal - 713340

REGISTRATION CERTIFICATE

This is to certify that JYOTI KUMARI SHAW

Son/Daughter of ARBIND SHAW

of RANIGANJ GIRLS' COLLEGE

is registered as a student of this University,

His/Her registration number is 113211210166 *of* 2021-22

Registrar

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Raniganj city Water pollution

• What is water Pollution?

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

Introduction

Water is quiquely vulnerable to Pollution Known as a" universal Solvent", water is able to dissole more substance than any other liquid on earth.

It's the reason we have Koel-Aid and brilliant blue waterfalls. It's also why water is so early Pollution, Toxic substance from farms, towns, and factories readily dissolve into and mix with it causing water Pollution.

The opencest 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 reventually 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 inadeaute or non-exiseat water born diseass occur when Parasites or other discase-cousing nicroorganism are to transmitted via contraminiated water Particularly water contaminated by Pathogens originating from excaeta, these inculude typhoid, intestinal Parasites, and most of the enteric and diarraheal diseases caused by bacteria Parasites, and viruses Among the most enteric and Parasitic disseases. causes are amoebiasis, giardiosis, and viruses are hookworm whatea

beased diseases are somewhat similar to water warm borne diseasis but are not typicaly on 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 servos as home to these organisms.

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

Causes of Water Pollution

Causes of water Pollution can be classified under two broad Categories. Point Source' which occurs when hermfull 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 facillity discharging effuent 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 clogs our water ways and blocks light to deeper waters while the organisms are alive, when the organisms die, they use up dissolved oxygen as they decompose.

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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 Spredding over Bardwan, Birbhum, Bankura and Purulia Districts. Heard of Raniganj coal field is however in Burdwan District bounded by Ajoy River in north and Damodar River in South on the basic of geographic distribution and use Pattern. 10 Pit Lakes were Selected for stadying the Physico chemical Prcertics of their water in Poemonsoon, 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 sensons curing 2014-2015 using Starded Protocals and guid-lines the value of earth Parameter was expressed as mean with standard deviations in the results.

tests for Physicochemical Parameters of water samples were per-formed by following standard methods given by Ameri can Public Health Association and Black (1965

Discussions

Variation of physicochemical Parameters of ten Pitlakes of Raniganj Found with their mean value: similar-ing were also reportand that key influen. Parameters Hardness, cholride and nitrate Nitrogen content of Pitlake water Parametors are positively correlated that indicate their effect on water quality.

Conclusion

The Based on the reasult of this present studies of the Pittakes of Ranigaoj Rajbari it can be concluded that water quality. It revealed that all Pittakes change with seasonal variation Such change were found in Ph. enductivity Alkalinity - Hardness chloride, Nitrate nitrogen and Phosphate phosephorous also Major factors in ~~di~~ dicate that Pittake water quality have the potentiality to him - Prove and restore itset with due course of time.

Certificate

This is to certify that content of this Project entitled "water Pollution." by Jyoti Kumari Show is the bona fide work of him submitted to "Raniganj Girl's College for consideration in Partial Fulfillment 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 sussessfully.

Date:-

Teacher's Signature.

8/3/22