

Raniganj Girls' College

Department of Zoology

Course Name: Environment Studies

Course Code: AEE101

Topic of the project:

Air Quality Of Raniganj Coalfield area

A Project Report

Submitted by the students of Semester-I

(Academic Year 2020-21)

Name of the student	Registration Number
Anjali Pasi	KNU20113001340
Saleha Khatun	KNU20113001358
Punam Rawani	KNU20113001379
Farhat Zahid	KNU20113001382
Riya Bauri	KNU20113001393
Suman Kumari	KNU20113001403
Priya Bauri	KNU20113001408
Noorjahan Khatun	KNU20113001416
Riya Zaminder	KNU20113001418
Nikita Kumari	KNU20113001439
Munmun Dhang	KNU20113001441
Shiwani keshri	KNU20113001459

CERTIFICATE

This is to certify that this project titled “ *Air Quality Of Raniganj Coalfield area* ” submitted by the students for the award of degree of Bachelor of Arts with Honours in History is a bonafide record of work carried out under my guidance and supervision.

Name of the student	Registration Number
Anjali Pasi	KNU20113001340
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Shiwani keshri	KNU20113001459

Place: Raniganj Girls' College

Date: 16.02.2020

Dr. Chinmoy Chatterjee

SACT-1

Department of Zoology

Declaration by the students

We hereby declare that the project work titled "*Air Quality Of Raniganj Coalfield area*" submitted in partial fulfilment of the requirement of Bachelor of Arts with Honours in History is an original work done by us during the year of 2020-2021. No part of this study is either published or submitted elsewhere for any examination.

Place: Raniganj Girls' College

Date: February, 2020

Anjali Pasi

Saleha Khatun

Punam Rawani

Farhat Zahid

Riya Bauri

Suman Kumari

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Nikita Kumari

Munmun Dhang

Shiwani keshri

Report

Aims and Objective of the project:

Coal mining activities and functioning of a number of medium-scale industries like sponge iron, cement, brick, thermal power etc. have adversely affected the environmental health of Raniganj Coalfield area as a whole. Occurrence of air borne diseases has become a common ailment of the inhabitants of this area. indiscriminate open air burning of coal by the local inhabitants for cooking as well as coking purposes and vehicular traffic also have considerable contribution to the high concentration of pollutants in this area.

The aim of our project was to investigate the contributory effect industrial development on the air quality and its consequent impact on human health of Raniganj Coalfield area.

Materials and Methods used:

Field visits were conducted at different factories and collieries to collect emission data. Visit to different hospital, nursing homes and health centres were carried out to survey the health status of the people suffering from respiratory and other pulmonary diseases. The whole survey was completed in three weeks during the month of December, 2020.

Conclusion:

Industrial growth and its product as pollution are increasing day by day. This has been causing adverse consequences on human health. Particulate matter and gaseous emission from industries are responsible for rising discomfort, increasing airway diseases, decreasing productivity and causing deterioration of environment. Major pollutants from sponge iron industries and coal mining industries include SPM, smoke, carbon monoxide and other poisonous gases and solid wastes. The pollution zones have been identified and health data has been collected accordingly. People have been found to suffering from respiratory problems. The results depict a clear correlation between health problems and level of pollutants.

Photographs



Different sponge iron factories in Mongalpur Industrial Hub.

Raniganj Girls' College

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Course Name: Environment Studies

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Topic of the project:

Industrial Impacts On Drinking Water Quality In Raniganj

A Project Report

Submitted by the students of Semester-I

(Academic Year 2020-21)

Name of the student	Registration Number
Sangita Majhi	KNU20113001461
Kabita Bauri	KNU20113001473
Debolina Mukherjee	KNU20113001516
Prity Roy	KNU20113001556
Rimsha Afreen	KNU20113001559
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Tania Adhya	KNU20113001636
Payel Das	KNU20113001655
Rishika Ghosh	KNU20113001660
Bipasha Kar	KNU20113001692

CERTIFICATE

This is to certify that this project titled "*Industrial Impacts On Drinking Water Quality In Raniganj* " submitted by the students for the award of degree of Bachelor of Arts with Honours in History is a bonafide record of work carried out under my guidance and supervision.

Name of the student	Registration Number
Sangita Majhi	KNU20113001461
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Bipasha Kar	KNU20113001692

Place: Raniganj Girls' College

Date: 10th February, 2020

Dr. Chinmoy Chatterjee

SACT-1

Department of Zoology

Declaration by the students

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Report

Aims and Objective of the project:

The objective of present study was to assess the impact of industrial sectors on quality of water, particularly the groundwater, which people use for drinking purpose in Raniganj town through studying health status of the consumers suffering waterborne diseases.

Safe drinking water is a basic need as well as an economic necessity, it is essential that the quality of water which is used for drinking should be safe and hygienic. It is therefore a responsibility of all to keep a keen watch on the potential causes of deterioration of quality of water on which people largely depend for drinking purpose. This fact prompted us to carry out this project work.

Materials and Methods used:

Field visits were conducted at different factories and collieries to see the effluent discharge sites. Visit to different hospital, nursing homes and health centres were carried out to survey the health status of the people suffering from waterborne diseases. The whole survey was completed in three weeks during the month of December, 2020.

Conclusion:

Most of the factories discharge their effluents through drains to the nearby channels or in open pits. As the channels are connected to the major river systems mainly the Damodar, the river is also getting polluted by the industrial effluents. Waste water stagnated in the lagoon allows seepage of water carrying toxic substances into the water table causing contamination of groundwater sources. People living in Raniganj town and nearby villages use groundwater for household purpose as well some times for drinking purpose also. The records collected from the hospitals and health centres reveal that most of the patients affected from waterborne diseases use water from subsurface sources for drinking.

Concerned authorities should impose stringent regulations on the factory owners in regard to the discharge of effluents immediately to save human health.

Photographs



Waste water discharge points of factories near Raniganj