



**EVS PROJECT REPORT:  
CASE STUDY OF ARTHALA  
LAKE DEGRADATION**

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## **ABSTRACT**

This report entails an analysis of Arthala lake degradation which is present near Hindon river.

The objective is to analyse the hygienic condition of the lake and to make people aware about the growing degradation of lakes in our country.

Methods should be developed to take care about the hygiene issues at the banks of lake and preventive measures should be taken for restoration and management of lake.

The main motive is to have a reality check for the condition of lakes and about the environmental issues faced due to the degradation of lakes.

## **INTRODUCTION**

Our task was to visit the Arthala Lake which is located in Ghaziabad, Uttar Pradesh.

On site we discovered various facts about the current condition of lake and the condition around the lake.

We interviewed some locals and found out the reasons contributing to the lake degradation and the problems occurring due to the degradation of lake. We observed various bad practices taking place at the site such as dumping of untreated waste; people especially small children bathing inside the degraded lake which poses various threats to their health.

## Causes of Lake Degradation

- **Inadequate rainfall**

Inadequate rainfall is the main cause of degradation of lakes. In dry places such as north western region of India lakes often gets dried up because of the lack of rainfall.



- **Industrial waste**

In some areas industrial waste is dumped into lakes without any treatment. This is due to the lack of governance that these industries get away easily creating a cause for degradation of lakes.



- **Washing clothes on the lake shore**

Due to lack of knowledge locals in the area wash their belongings in the lakes causing chemicals and detergent enter the lake water. These chemicals are harmful for the marine life and even degrade the water in the lake.



## CASE STUDY

Team members visited the site and interacted with the locals to have an insight about the ongoing practices and issues faced by them if any.



While interacting with the locals

On asking about the problems they face due to the unhygienic water and foul smell, astonishingly we got to know that they were fine with it, even without masks or any other protection.

They said that they are used to such environment and so are their kids.

Condition near the Lake



Unhygienic condition of  
Lake water



## **ANALYSIS**

The most common exposure at the site was of foul smell. This involves health hazards from airborne pollution, or, in other words, the presence of infectious and harmful bacteria and viruses in the area.

Other types of exposure may occur involving skin contact, vector borne diseases, direct contact with toxic and/or harmful waste material, accidental ingestion of toxic chemicals or of polluted water/liquids



Dumping of Garbage

## **1. Dumping of Garbage**

Massive dumping of solid and biomedical wastes, disposal of sewage from the unauthorized, illegal colonies situated in Arthala village in Pargana Loni serve as one of the major reasons for the lake degradation.

## **2.Unplanned Urbanisation and Encroachment**

Encroachments have, over the years, shrunk the water body, and large parts are full of filth. Encroachments along with the illegal and unauthorized constructions on and around the lake have, over the years, reduced the area of the lake, which was originally 2,03,662 sq. meters. Around 1,60,000 sq. meters of the lake has been encroached.

The encroachments around Arthala lake are estimated to be housing at least 7000 residents. Locals residing in the vicinity dump solid waste in the swampy areas near the water bodies.



**Encroachment and waste collection near the lake**

### **3.Illegal construction**

Owing to an act of illegal construction, Arthala lake gave way to a banquet hall and its original size was substantially reduced by influential politicians who took over the area.

The Arthala lake which was spread over 50 acres earlier has been reduced to 35000 sq. metres. The rest was filled with solid waste on which an Indira Priyadarshini Park was developed and leased to influential politicians at throwaway prices.

The lease holders converted the park to a banquet hall and reduced the original lake to the size of a pond, with mud and dirt flowing from neighbouring residential localities. Four restaurants too came up in violation of rules.

### **4.Excessive Weed growth**

Excessive growth of weed can have a detrimental effect on a body of water and its inhabitants.

Some of the problems caused by aquatic weeds are as follows:

- Interfere with or prohibit recreational activities such as swimming, fishing, and boating.
- Detract from the aesthetic appeal of a body of water.
- Stunt or interfere with a balanced fish population.



**Excessive growth of Weed, promoting waste dumping practices**

## On site pictures



## **Steps Taken**

### **NGO- SPENBIO**

AUGUST 24,2017 When the authorities failed to take any action on residents' complaints about a hospital and a distillery discharging untreated waste in Arthala Lake, the city based NGO- SPEnBIO approached the green tribunal seeking removal of all illegal constructions and encroachments on Arthala lake and restoration of the lake to its natural form.

"The encroachments, illegal constructions and unauthorised occupation on Arthala lake are resulting in environmental degradation and causing hazard to public health." the NGO submitted.

"The industrial effluents, sewage and solid, biomedical wastes flowing directly into the lake, are contaminating the entire ground water table of the region and is adversely affecting the health of the thousands of people residing in nearby residential colonies and is a violation of the Environment Protection Act, 1986 and Water (Prevention and Control of Pollution) Act 1974," head of the NGO said.

### **NGT**

After a yearlong litigation started by the Society for Protection of Environment and Biodiversity (SPENBIO), the NGT passed an order on the matter directing the authorities in the city, including the Ghaziabad Development Authority, to take action against the polluting parties, and restore the lake's natural disposition.

AUGUST 7,2018: The National Green Tribunal directed the district administration to remove all encroachments from near Arthala lake. The tribunal's principal bench in Delhi, headed by judicial member Justice Raghuvendra Singh Rathod and comprising expert Dr S S Garbyal has given the authorities three months' time to comply with its order. The NGT order implies a recovery of the lake's catchment area which would entail removal of illegal houses and factories in the vicinity

## **CONCLUSIONS**

From our interaction with the Locals, it is very clear that they are not aware about the difficulties that they might face in a long run due to degradation of lake.

It was very well observed that environmental Pressure of unplanned urbanisation and growth of population have taken its toll on wetlands.

Lakes are polluted mainly due to sewage from domestic and industrial sectors.

It requires immediate attention from the authorities to restore them.

Hence, it is the need of the hour to start following the guidelines to treat the lakes and our environment. Environment is not just for the present but for the future generations as well.

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