A Quantitative Study of Water Pollution of Rural Area in Gaya District

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Abstract - A study deals with "A Quantitative Study of Water Pollution of Rural Area in Gaya District." A method was to studded that on empirical in nature. documentary, historical, analytical and descriptive methods have been used. The information has been collected on rural areas in Gaya district and sample was taken 50 (N) primary data while, secondary data has been collected from water pollution related areas etc. To study the efficacy of constitutional and statutory provisions in preventing and controlling water pollution. Hypothesis was that Growing population, industrialization and excessive use of pesticides are the main causes of water pollution, The results was to found that awerensess of level of water and causes of water pollution.

Keywords: Water pollution, Water level, pH meters and Environment etc.

INTRODUCTION

Water is one of important needed element in our life. Without water we can't survive. Water is necessary and facilitated any movement and circulation of nutrient in invironmet-biosphere. We know that 97.00% of the world's water is in the oceans, and that due to the saltiness of the oceans, plants and animals living on land do not have real ocean water and therefore cannot use salt water. In places like Antarctica and Greenland, large amounts of water are frozen in ice sheets. This is fresh water but it cannot be used. 1% of the world's water is available underground as groundwater or surface water. Although it is a serious figure that humans can only take 1/2 of all the water in the world, it is enough to remind people that water is a limited resource. Health and environment have become major problems because they interact with each other and affect the entire economic development process. Water resources are becoming increasingly polluted. Many rivers around the world receive billions of litres of sewage, domestic waste, industrial and agricultural waste. In India, all 14 major rivers are polluted. The first decade dedicated to water (1981-1990) reportedly provided water to over 1,00,000,00-77,000,0 human. At the time, these were hailed as impressive achievements. On March 22, 2005, the United Nations announced the start of the International Year of Action for Water for Life. This is the second time the United Nations has declared a Decade of Water, and water is the only internationally recognized resource. But more than 1 billion people still need adequate drinking water, and more than 2.4 billion people lack some form of sanitation. Even optimists who often think the glass is half full must admit that this is a major problem. Despite economic growth, one in six people in the world still lacks access to drinking water. A large portion of this comes from India. According to the Water (Prevention and Control of Pollution) Act, 1974, water pollution means contamination of water or alteration in its physical, chemical or biological properties by human beings from water or sewage or drains or other liquid, gaseous or solid matter which (directly or indirectly) causes a nuisance or impairs the quality of water or endangers human-health or human-safety or discharges into water for domestic. commercial, industrial, agricultural etc has lawful purposes or to animal, plant or aquatic life and health. So water pollution is not limited to just one region or country because everything in the environment is interconnected and directly or indirectly affects each other and today it is a global crisis.

Water pollution is the major problem in this universe. Water is considered one of the measure causes of death and disease worldwide, causing more than 14,000 deaths every day. In India, about 1,000 Indian children die every day due to water pollution. Contaminated water causes a lot of suffering, illness and death from infectious diseases in developing countries. The pH value around the Falgu River is 5.3-6.2. 7 After independence, our country is still developing its economy, which causes the problem of water pollution. A very influential state. Almost every town and village in Gaya is facing the consequences of water pollution. The results of various studies conducted in Gaya have shown that human milk, water, vegetables and other food products contain pesticides that are harmful to human health. Recently, a study conducted by Gaya Agriculture (DM) has shown that arsenic in drinking water can cause cancer. In the last few years, the number of cancer patients eating salad has increased due to the excessive use of pesticides that contaminate the groundwater they consume. During tests conducted by the Pollution Control Board, trace amounts of DDT and benzene hexachloride (BHC) were found in the drinking water of the canal.

Therefore, the problem of water pollution has gained importance due to the gradual depletion of our water resources. In order to save the lives of people and our ecosystem, water pollution needs to be controlled and prevented. > Laws to protect the environment - There are some laws that deal with the environmental issue. First of all, the doctrine of the Indian Constitution states that our country follows the tradition of socialism and the state approaches social issues more correctly than other personal issues. The main purpose of the leadership on the ensure a decent standardize of any living hood and this may be put on our environmental free pollution.

Water Pollution: Prevention & Control:

To prevent & control water pollution, the Water PCP-Act-1974 was enacted-lt was enacted at a time when the country was ready for industrialization and urbanization. Domestic and industrial wastewater needs to be treated before being discharged into rivers and streams. has been. Therefore, it is good to preventing also control the water-pollution and to controling treat the quality of water. To achieve this objective, the Water-Prevention and Control of Pollution: Act-1974 providing establishment of Central and State Water Management Committees and lists the powers and workings of the committees. The State-Pollution-Control-Board 2022-23 is responsible for developing and implementing comprehensive plans to prevent, control also reduce pollution of streams and wells in the state. The SPC-Board advises the state government on all matters relating to state preventions and water-control or reduction of water pollution. The NPC Board of responsible for collecting to publishing informed that on water-pollution preventing and water-control or reduction.

METHODS

This study is empirical in nature. Documentary, historical, analytical and descriptive information is used wherever needed. The data survey is collected from primary & secondary sources. Primary data included interviews with the residents of five village blocks in Gaya district. Questionnaires and reservation procedures were used to collect the necessary information. The surveys were also used to provide information about the living conditions of the people in the affected areas. Secondary data was collected from water pollution allegations, judicial decisions, Supreme Court, books, journals, newspapers, magazines and the internet.

OBJECTIVE

To study the efficacy of constitutional and statutory provisions in preventing and controlling water pollution. The State Contamination Control Board is to empower, conduct and take part in examination and inquire about relating to issues of water contamination and anticipation, control or decrease of water contamination.

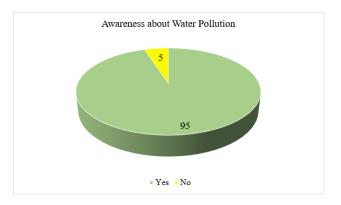
HYPOTHESIS

Growing population, industrialization and excessive use of pesticides are the main causes of water pollution.

RESULTS

1. Awareness people Water-Pollution:

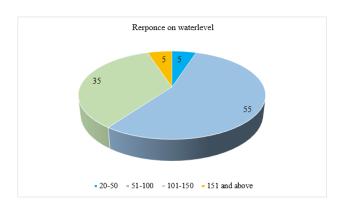
Mindfulness approximately Water Contamination as per figure number 1, we discover that each single individual in locale Gaya is mindful of the issue of water contamination. This highlights the large-scale predominance of water contamination in Gaya area. Additionally, mindfulness of a specific issue is additionally a pointer within the heading that appropriate direction with regard to diverse angles of water contamination will be taken in its proper perspective and all isn't misplaced on the off chance that there's a will on the portion of the interested parties to check this danger.



Graph-1 appears that the individuals within the area of Gaya were mindful of the presence of water contamination, it was felt that there's a have to be discover out whether they were mindful of the presence of this issue in their range as well. In this way, we are moreover able to decide the presence of water contamination within the respondents this regions. In this way, I inquire address of the survey enquired from the respondents around their mindfulness with respect to presence of water contamination in their particular regions. There are 95.00% respondents are awarding on the existing of these areas of water-pollution. While 5.00% respondents have been less existing of these areas of water-pollution, the results been shows that the highlight on Gaya district extended problems of water-pollution.

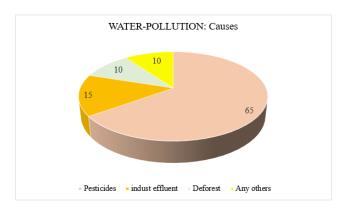
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2. Water levels:



Graph-2 shows that the level of water the respondents' of this area water label of Gaya district varies from 5.00% on 20-50 feet, 55.00% on 51-100 feet, 35.00% on range is enduring from moo level of water table to the tune of 101-150 feet and 5.00% on 151 feet and above. There's no shortage of water in most of the areas, but there's certainly deficiency of consumable water in most of the ranges, which is the major cause of concern.

3. Water-Pollution: Causes:



Graph-3 shows that the measure causes of water pollution in Gaya district. There is 65.00% on pesticides, 15.00% on industry, 10.00% on deforest and any others. The results conform's hypothesis. The approach by expressing that the bothers have ended up so safe to pesticides that they are cleared out with no other elective, but to keep showering pesticides time and once more. It was under writes this reality and appears that 75.00% of the respondents ascribed water contamination in their regions to intemperate utilize of pesticides and bug sprays.

CONCLUSION

About Gaya district is underdeveloped in terms of industrialization. Although it does not have much industry compared to other large areas, it still produces 15.00% of the water pollution of the region. Poor environmental management and operation are clearly exploiting natural resources and leaving untreated wastewater everywhere. Even the thermal power plants in the region are causing water pollution in the region. More importantly, lack of proper planning has led to the emergence of large plantations. Little has been done to solve the plantation problem, but over time people have realized that there is an urgent need for more plantations in their area.

Water pollution due to deforestation is only 5.00%. In addition to the above reasons, 5.00% of the water pollution problems in the area are due to some reasons of the specific area, some are due to the surface area of the land. The victims were the worst, so much so that it got the famous name of cancer. In the studied areas, water pollution causes serious health problems such as cancer, liver diseases, stomach disorders. In the investigation, it was determined that even today (until June 2023) approximately 6 people in the village have contracted the deadly disease and lost their lives.

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