WATER POLLUTION IN INDIA: CAUSES AND EFFECTS

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ABSTRACT

Water pollution is a big problem in India. Water pollution is a nasty change in the condition of water contaminated with harmful materials. When poisonous materials enter the lakes, panels, rivers, oceans and other water bodies, in water they are dissolve and become suspended or are stored within the bottom. It ends in water pollution, which determines the level of water, influencing the aquatic ecosystem. Pollutants also can brought down and influence underground water deposits. After the pollution, water pollution is the second most important environmental issue. Water Bodies pollution interrupt the ecosystem as a whole. Foul water is not only unsecured to drinking and other consumption objectives, but it is also inappropriate for farming and industrial uses. The results of pollution are harmful to the people's groups, plants, animals, fish and bird. Using it to drink is the main reason for water borne diseases such as diarrhea, dysentery and typhoid. This problem has been caused by industrialization and urbanization in India in recent years. The right to reach water is ultimate human rights. The Indian constitution does not create this right an exclusive right. Article 21 of the Indian's constitution gives that every individual has the authority to life. In this article, it is right to drink clean water. The man's life cannot run from contaminated water. For a healthy life pure water is the only hope. The basic cause of many diseases is contaminated water. There are several reasons responsible for polluted water. Contaminated water does not come from a one source. Under article 47, duty of the state to increase the nutrition's level and level of life including improving people's health. The state's ach citizen is also duty that they protects and improve the natural environment including rivers, lakes, wildlife, forests and mercy for living beings.

Keywords: Pollution, Scientific, Agriculture, Disease, Urbanization, Human Right, Contaminated, Forests.

Introduction

Contaminated water is the main reason of several diseases. Contaminated water influence not only current generation's life but also influence coming generation's life as its impact lasts for long time. As example, Bhopal gas tragedy can be taken, Bhopal gas tragedy is world's most horrific industrial disaster. With studies from official scientific agencies showing that underground water pollution has spread 40 meters deep and up to 3.5 km from the abdicated factory. In the last 14 to 20 years, almost 40,000 people have consumed this polluted water and in some of the country, cancer, birth defects and diseases related to skin, brain, lungs, kidney and liver are many times more popular, the use of water is manifold. Without water human survival is not possible. Without water man cannot live. Clean and pollution free water is essential for a healthy life. If water is contaminated in an area, people or other organisms are constrained to drink polluted water because they have no other choice and they cannot live without it. Water pollution is serious problem around the country in recent years, mainly due to the presence of untreated effluents, pesticides or chemicals. Many reasons are here for water pollution. These reasons can be overcome and at least people can be controlled by strong implantation of awareness and legislative measure. But, in India, this right to clean and adequate water is enshrined in article 21 of the India's constitution.

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Cause and Effects of Water Pollution

Water pollution means changing the natural quality of water to make it unfit for human consumption. In many ways water pollution can be explained. This usually means that one or more substance have accumulated in the water to such an extent that they create problem for people and animals, pollutants in water include a wide spectrum of chemicals, physical chemistry and pathogens or sensory transformation. Many chemical are poisonous. Pathogens can cause waterborne diseases. Changes in the physical chemistry of water involve electrical conductivity, temperature, acidity and eutrophication. Among the most serious influence of contamination of water are human infection diseases. About 50,000 million liters of waste water both domestic and industrial, is generating in city area every year, in India. If village area's data are also taken into account, then the total data will be much higher. The report according to United Nations published on world water day on March 22, 2010, in India 80% of urban garbage ends in rivers of the country and poor government oversight along with uncontrolled urban development around the country means that problem is only getting worse. India has increasing number of water unfit for human use and 82% of the country's Hindu majority is slowly dying because of uncontrolled pollution in the Ganga River. In India, contamination of water is a big problem. Only 10% of the generated waste water is treated: the rest is left as it is in our water bodies. Because of this pollutants enter the river, ground water and other water bodies. Polluted water has serious impact on the human body, we can divide the reasons of contaminated of water into two parts, First is major and second is the other.

- Major Reasons: in this classification we can involve those pollutants that enter direct in water resource and pollute it. The main source of industrial waste water pollution is either surface water or unground water, in industrial sector. There industrial garbage is released direct into waterways. Industries discharge different type of pollutants in their wastewater including heavy metals, resin pellets, organic toxic substances, nutrients, oils and solid substances. There may be thermal impacts in discharge, particularly from electrical stations and these reduce the available oxygen. The sewage of the city is also main reason for water pollution. Sewage is also known as waste water that usually consists of laundry waste, dishwashing garbage, urine and feces. Today, in India disposal of this garbage is a major problem, which is why lakes and rivers suffer. Drain water pollution can cause diarrhea and the like. About 70% of contamination of water in Punjab is due to sewage which not only pollutes drains and river water but also affect groundwater in cities and town. The pollution of Ghaggar is also harming the groundwater and the human population that is used in this process is getting skin disease and other diseases. Due to highly polluted water a large number of underwater fish and other fauna are dead, which is a comprehensive smell in the surrounding area of the Ghaggar. After its water test, it was found that against the normal biochemical oxygen demand (BOD) level of 3mg per liter, it was 25 to 30 mg per liter.
- Other Reasons: when pollutants are taken from water to resources, then they can be called
 indirect reason. Rain or snow picks up pollutants because it walks through land and then deposit
 them in water sources. To help in the growth of their crops for farmers, useful fertilizers and
 other chemicals are common. Yet, these chemicals and nutrients mixed in the soil can absorb in
 underground water supply.

Disease Burden Due to Water Pollution

In India the public health effects of pollution is huge. Different types of diseases between high morbidity and mortality are spread widely within the communities, especially who live in unfit environmental conditions in urban slums and vast rustic areas. The major diseases responsible to pollution and poor drinking supply are diarrhea, cholera, shigellosis, E. coli diarrhea, poliomyelitis, typhoid and waterborne hepatitis. Of these, there are about 0.6 million deaths annually from disease of diarrhea. In the slum areas of main cities, the incidence of diarrhea is 10.5 cases per child per year. Diseases caused by enteric pathogens transmitted orally by faeces account for 10% of the total diseases burden in India. Statistics show that the group of intestinal diseases claims the lives of around 5 million people and around 50 million people suffering from these diseases every year. But organic contaminants, chemical contaminants like fluoride, arsenic and other heavy metals create a serious crisis within the country. It is estimated that in almost 20 states, around 70 million people are in danger due to more fluoride and around 14 million people are in danger due to more arsenic in water. Besides these, increasing concentration of chlorides, total dissolved solids (TDS), nitrates, iron in water is of great concern for a sustainable drinking program. The concentration of chemicals is increasing day by day due to over-

exploitation of subsoil water. The impacts of pollution seem to be disastrous not only for people but also for animals, fish and birds. After all this, it is a threat to human health. Diseases of water related are contagious, spread mainly via polluted water. Although these diseases are spread either direct or by dirt or flies, water is the main medium for the spread of those diseases and hence they are called water borne diseases. Bowel diseases are more prevalent in areas with poor sanitary situations. From these diseases are highly contagious, people caring for an infected patient must maintain utmost care and hygiene. Hepatitis, cholera, dysentery and typhoid are the more normal waterborne diseases that influence a large population within tropical area.

Remedies in Case of Water Pollution

The best solution is to approach the court in case of contamination of water. It is obstacle to pollute a well, pond or nay water resource. The nuisance can be public or private. A suit for personal nuisance may be claimed if the use or consumption of any person's assets or any right over or in relation to it is interfered with by undue water pollution by another. Infringer in public nuisance can be punished with criminal punishment, penalty or both. Section 268 of the Indian penal code, 1860 provides that a person is convicted of public nuisance who commits any act or is guilty of an illegal omission which is injury, risk or annoyance to the public. Sections 133 to 144 offer a measure in case of public nuisance of criminal process code. Section 133 gives the right to pass the orders of removing the public fuss within a certain period. Measures to control water pollution by the (PIL) can be asked to the court. The expression public interest litigation means a legal action initiated in the court for the origination of public interest. In any high court a public interest litigation (PIL) or social interest litigation can be filled and in Supreme Court under article 226 and 32 respectively. In the Supreme Court, the PIL can be filled only if there is a question related to the enforcement of fundamental rights and it can be filed in the high court whether a fundamental right is involved or not. It can be filed by any public sentiment citizen for the enforcement of the constitutional and legal rights of any person or group of persons, which are unable to knock the court door for relief due to their social financially deprived situation. Article 32 of the India's constitution is a great security to cover the basic human rights provided under constitution's part IV. It is a weapon to protecting the right of reaching pure water. However, the right for water is not clearly a basic human right under the constitution of India, but from a judicial point of view this right is enshrined in article 21 of the India's constitution. Attakova Thangal Vs Kerala high court. Union of India 1990 KLT 580, in article 21 responsible the right to clean water as the right to life, in S.K. Garg Vs State of Uttar Pradesh, air 1999 in all 41, the scope of article 21 was extended to include the "right to water". The court said that the right to get water in our opinion is part of the rights of guaranteed life by the article 21 of the constitution but a large segment of Allahabad's civilians is deprived of this right. Allahabad's civilians are passing through terrible pain and crisis without the water, especially when in season, the temperature goes up to 46 or 47°C.

Conclusion

The current study has been found that the right to reach clean water especially by India's constitution or any other act has not been given. It's applied to the state to provide pure water and to stop and control water solution. The current study shows that water pollution in India is a crucial issue. Under article 32, the power of the Supreme Court is not only injunctive in the scope that is preventing violating the basic human rights, but it is the therapeutic in the scope and provides relief against the violation of fundamental rights made before. This paper shows that waste water treatment plant in India is not enough, trying to be done. In order to save aquatic life in Ganga and to effectively treat waste water, in the city two pilot projects have been taken by WWE. In the study emphasizes on setting up of sewage treatment plants in each urban settlement. In water pollution, the planet has the ability to interrupt life on a large extent. Congress has passed laws to deal with water solution and accepted the fact that water pollution is actually a serious issue, but the government alone cannot solve the whole problem. We should be familiar with your local water resource and should learn about the disposal of harmful domestic waste so that they do not end in sewage treatment plants that cannot handle them or are not designed to get dangerous content. We should determine whether additional nutrients are required before applying fertilizers and not to seek where the fertilizers can flow in surface waters. We have to protect exiting trees and plant new trees and bush to help stop soil erosion and water infiltration into the soil. We should keep out of the gutter and stormy drains, gentle garbage, leaves and grass clipping around our homes. The study emphasizes the establishment of the judiciary burden and to establish a separate environment court in each state to implement the recommendations of the 186th report of the law commission of India.

References

- Agarwal, D.K., Gaur S.D., Tiwari I.C., Narayanaswamy, N. and Marwah, S.H. (1976), "Physico-Chemical Characteristics of the Ganges at Varanasi", Indian Journal of Environmental Health, Vol. 18, No. 3, Pp. 201-206.
- 2. Babu, A., Chinnaiyan,P. and Abinaya .S, (2017), "Effect of Dyeing and Textile Industry on Noyyal River Water Quality, Tiruppur A Case Study", International Journal of Civil Engineering and Technology (IJCIET), Vol. 8, Issue 10, Pp. 1064- 1071.
- 3. Chandrasekar M, (2007), "Effect of Textile Dyeing Industry on Land and Water Pollution in Tiruppur District Tamil Nadu", Tamil Nadu State Land Use Board Project Report 2004-2006, Tamil Nadu Agriculture University, Coimbatore, Pp. 1-143.
- 4. Chaudhry, F.N. and Malik M.F. (2017), "Factors Affecting Water Pollution: A Review", Journal of Ecosystem & Ecography, Vol. 7, Issue 1, Pp. 1-3.
- 5. Dhivya.K (2016), "Impact of Water Pollution on Agriculture in Uthukuli Block of Tiruppur District", Unpublished M.Phil Thesis, Department of Economics, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- Gandhimathi, S (2007), "Impact of institutional finance on farm production, income and assetholding in selected blocks of Coimbatore district - A disequilibrium credit market approach", Ph.D Thesis submitted to Department of Economics, Avinashiling
- 7. Geetha, A., PalanisamyP.N., SivakumarP., Kumar G P. and Sujatha. M, (2008), "Assessment of Underground Water Contamination and Effect of Textile Effluents on Noyyal River Basin in and Around Tiruppur Town, Tamilnadu", E-Journal of Chemistry, Vol.5, No.4, Pp. 696-705.
- 8. Jothimani, P. and Bhaskaran A. (2002), "Effects of Dilution and Dynamics of Physical Factors During Factory Effluent Irrigation", Journal of Ecotoxicol Environment Monitoring, Vol. 12 No. 40, Pp. 255-261
- 9. Kalpana, B.V. and Gaikawad V.B. (2013), "Water Quality Assessment of Godavari River at Nashik, India: Impact of Sewage and Industrial Wastewater", Universal Journal of Environmental Research and Technology, Vol 3, No. 4, Pp. 452-457.
- 10. Ladu J.L.C., Athiba A.L.,Lako S.T.V. and Lomoro M, (2018), "Investigation on the Impact of Water Pollution on Human Health in Juba County, Republic of South Sudan", Journal of Environmental Pollution and Human Health, Vol.6, No.3,Pp. 89-95.
- 11. Maharajan, K and Kirubakaran Samual (2011), "Impact of Environmental Pollution on Health." Journal of Ecobiotechnology, Vol. 2, No.2, Pp.51-56
- 12. Nagaraj N., Chandrasekar, H. and Mangala, K.P, (2003). "Groundwater Pollution Induced Externalities in Vrishabhavathi River basin in Bangalore Hunter Lands: A Study in Peninsular India". Paper presented at information support sustainable water management, Netherland 15-18 September 2002.
- 13. Pathak, H., H. C. Joshi, A. Chaudhary, R. Chaudhary, N. Kalra and M. K. Dwiwedi (1999), "Soil Amendment with Distillery Effluent for Wheat and Rice Cultivation", Water, Air and Soil Pollution, Vol. 113, Nos. 1-4, Pp. 133- 140.

