

To Search Solutions for Water Pollution

**Manmohan Verma**

Assistant Professor,
Dept. of Chemistry,
Government Degree College,
Babrara, Gunnaur, Sambhal,
U.P., India

Abstract

There is acute scarcity of drinkable water in India and in globe. Water is being polluted by human's technological and developmental activities.

The day may come when these technology and development will become cause of our destruction. Main reason for water pollution is our domestic sewerage, sewage and industries. Our industries do not treat their contaminated water. Alarming situation is that 80% of Indian water is polluted, a assessment by Water Aid.

Latest data from the ministry of urban development (2013) and central pollution control board estimated that about 80% of water pollution comes from domestic sewerage and sewage while untreated water from industries have been doubled now. It leads vector borne diseases, cholera, dysentery, jaundice and diarrhea etc.

From 1991 to 2008, untreated sewerage has been from 12000 million liters/day to 24000 million liters/day n I and II class cities.

According to report there are 269 sewage treatment plants across the country. 211 plants in I class cities, 31 plants in II class cities, 27 plants in smaller cities.

Our government should take this as a national mission. It should establish a large number of sewage, sewerage and solid waste treatment plants in the country. It should recruit a large number of cleaning workers and officers for doing cleaning work in these treatment plants. For this work, government require to provide and invest huge amount of money. People should cooperate with full dedication in this work of government.

Keywords: Contaminated Water, Domestic Sewerage, Vector Borne Diseases, Cholera, Dysentery, Jaundice And Diarrhea, Drinkable Water.

Introduction

Contamination of water bodies is called water pollution. Water become polluted when it become impaired by anthropogenic contaminants. Thus it cannot be used as drinking water. Natural disaster like volcanoes, algae blooms, storms, earthquakes and tsunami also cause major changes in water quality and water ecological status.

It is a major global problem. It requires evaluation and changes of water resource schemes at all levels. Water pollution is the leading worldwide cause of death and diseases. Water pollution has been cause for deaths of millions people every year. Two countries China and India have very high levels of water pollution. In a estimate about 580 people die in India of waterborne illness and disease every day. Developed countries are also struggling with water pollution. Main sources of water pollutions are all type of industries, kitchen of house, cleaning of clothes, pesticides, insecticides, modern agriculture etc. Real solution of water pollution is only that we should do our all activities naturally. We have to limit our uncontrolled growth of chemical, leather, sugar, textile, plastic, rubber, paint, paper, cleaning product, readymade food, industries. We have to stop using chemical fertilizers, insecticides and pesticides in agriculture sector. We have to go for organic agriculture. We have to stop chemical cleaning products and 99% plastic use in daily life.

Review of Literature

The very big source of water pollution in India is untreated sewage. Other source are agricultural runoff and unregulated small and big scale industries.

In the study of 2007, it is found that discharge of untreated sewage is the single most important source of pollution of ground water and surface water in India.

There are big difference between generation and treatment of domestic waste water. India lacks sufficient treatment plant capacity. Some sewage treatment plants exist but do not operate and are not maintained.

A WHO 1992 study reported that out of India's 3,119 cities and towns, only 209 have little sewage treatment facilities.

Government and private Investment is needed to bridge the gap between sewage generate and its treatment capacity per day. Metro cities of India produce 38,354 million liter per day (MLD) of sewage with urban sewage treatment capacity of 11,786 MLD. Most of the Indian rivers are severely polluted by domestic sewage.

Water quality monitoring In 2010 found that almost all rivers with high levels of BOD (Biological Oxygen Demand) is the amount of dissolved oxygen needed by aerobic biological organisms to break down organic material present in water body sample at certain temperature and in definite time period (a measure of organic matter pollution). The worst pollution in decreasing order are as river Markanda (490 mg/l BOD), river Kali (364 BOD), river Amlakhadi (353 BOD), Yamuna canal (247 BOD), river Yamuna at Delhi (70 BOD) and river Betwa (58 BOD). For reference water sample with a 5-day BOD between 1 and 2 mg O/L shows a clean water.

Punjab Pollution Control Board and PGIMER in 2008 revealed that in villages near Nullah fluoride, mercury, beta-endosuphan and heptachlorpesticides were more than permissible limit (MPL) in tap and ground water. The water has high concentration of COD and BOD, ammonia, phosphate, chloride, chromium, arsenic and chlorpyrifos pesticide with nickel, selenium, lead, nickel and cadmium.

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According a report nearly 17 million urban households out of 20% of total 79 million urban households lack adequate sanitation

Aim of the Study

The aim of study is to present ideas to help in solving water pollution at all levels. It is easy but it requires robust intention, dedication, and responsibility toward our environment and societies. We have to implement our rules and corruption free system. Our government and societies will have to give due concern and importance to water pollution calamity, otherwise this problem will destroy our all development.

Methods and Materials

There are some methods to stop water pollution in India. It is work of all people of all societies in India. Central government and State government should plan strategies to solve very big problems of water pollution.

The methods to stop and solve water problems of India.

1. All people of India must cooperate in water and solid waste management processes adopted by Indian Govt.
2. Central government and State government should plan and fund strategies to solve very big problems of water pollution.

3. A large number of Sewage treatment plants and solid wastes management plants should be established by Govt aid.
4. A large number of sewage and sewerage water treatment plant workers are to be recruited as early as possible for working in these plants.
5. All industries must treat and purify their waste contaminated water produced. There should be huge penalty on that industry which do not comply waste water treatment process in the boundary of industry.
6. No domestic sewerage polluted water and waste water effluent of industry should be allowed to pour in river and ponds.
7. All chemical, sugar, automobile, rubber, plastic, textile fiber, rechargeable battery work, paper, paint, leather and other hazardous industries must be reestablished collectively at one place of a state, so that a critical watch on waste and contaminated water treatment can be kept.

Results and Discussion

If we follow given parameters in the subtopic methods of this paper, we can definitely solve the big problem of water pollution in India. People must aware of critical importance of solid, sewerage and contaminated water management and devoted them self in this work.

Central government and State government should plan and fund in solid, sewerage and contaminated water management strategies without further delay.

Without any further delay, large number of Sewage treatment plants and solid wastes management plants should be established by Govt aid.

All industries must treat and purify their solid waste and waste contaminated water produced by them. Huge penalty is urgent on that industry which do not comply waste water treatment process in the boundary of industry.

Domestic sewerage polluted water and waste water effluent of industry should not be allowed to pour in river and ponds. People and Govt must swear for this.

All industries like chemical, sugar, automobile, rubber, plastic, textile fiber, rechargeable battery work, paper, paint, leather and other hazardous industries must be reestablished collectively at one place of a state, so that a critical watch on waste and contaminated water treatment can be kept. Our rivers are turning worse due to increase in pollution level

Conclusion

It is my view to solve this critical issue of water pollution. Several parameters and works to be done are given here. It is the matter of urgent call now. Neither government nor can people of India make further delay in adoption of these parameters. Water pollution data are crying for inevitable need to do something. Data and planning are sufficient but big problems are when to implement these parameters

Reference

- Google search on "water pollution data in india"
- Kahn, Joseph; Yardley, Jim (August 26, 2007). "As China Roars, Pollution Reaches Deadly Extremes". *New York Times*.
- Kelland, Kate (October 19, 2017). "Study links pollution to millions of deaths worldwide". *Reuters*.
- Moss, Brian (2008). "Water Pollution by Agriculture" (PDF). *Phil. Trans. R. Soc. Lond. B.* 363: 659–666. doi:10.1098/rstb.2007.2176. PMC 2610176.
- Pink, Daniel H. (April 19, 2006). "Investing in Tomorrow's Liquid Gold". *Yahoo*. Archived from the original on April 23, 2006.
- UN-Water (2018) *World Water Development Report 2018: Nature-based Solutions for Water*, Geneva, Switzerland
- West, Larry (March 26, 2006). "World Water Day: A Billion People Worldwide Lack Safe Drinking Water". *About.com*.
- <https://en.wikipedia.org/water pollution>.
- 80% of India's surface water may be polluted, Sushmi dey: TNN : Updated : jun 28 2015 , 04:42 IST
- https://en.wikipedia.org/wiki/Water_pollution_in_India