

“SOURCES OF WATER POLLUTION IN INDIA”

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Abstract

This paper outline the sources of water pollution in India an overview water pollution is the contamination of water bodies this form of environmental degradation occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds. Water pollution is any chemical, physical or biological change in the quality of water that has a harmful effect on any leaving thing that drinks or uses or lives it.

Introduction :

To the best of scientific knowledge, life can not exist without water and that is why water is popularly called liquid of life. Water covers more than 70 percent of earth's surface, of which 97.3 percent is in ocean and 2.7 percent is as fresh water. The fresh water is held up in ice caps and glaciers (72.2 percent), ground water and soil mixture (22.4 percent), lakes and swamps (0.35 percent), atmosphere (0.04 percent) and stream channels (0.01 percent). Clean water is essential for the survival and health of all living organism.

Objective :

To study the sources of water pollution in India is the main objective.

Methodology

Being an explanatory research, this study is based on secondary data of journals, articles, newspapers and magazines, considering the objective of study descriptive type of research is adopted.

Subject Analysis

Water pollution is a major environmental issue in India. The largest source of water pollution in India is untreated sewage. Other sources of

pollution include agricultural runoff and unregulated small scale industry. Water pollutants are of different types which may be biological agents, chemical agents and physical agents.

Some common sources of water pollution are as follows :

1. Domestic Water :

Domestic pollution is the pollution caused to the earth by domestic use such pollutants may be biodegradable or non-biodegradable. Domestic sewage contains a wide variety of dissolved and suspended pollutants. The main organic materials are food and vegetable wastes. Plant nutrients come from chemical soaps, washing powders etc.

2. Sewage :

Sewage is the term used for waste water that often contains feces, urine and laundry waste. Sewage disposal is a major problem in India, many people of India's don't have access to sanitary conditions and clean water. Untreated sewage water in such areas can contaminate the environment and cause disease such as diarrhoea. Sewage is mainly biodegradable and most of it is broken down in the environment.

3. Industrial Wastes :

Industrial waste is defined as waste generated by manufacturing or industrial process. Industrial wastes from metal finishing and electroplating plants contain toxic heavy metals and poisons like cyanides; tanneries contain large quantities of chromium, tannin calcium and chlorides and coke works, liquors and effluents from plastic factories have a high content of phenolic compounds.

4. Fertilizers and Detergents :

A fairly large amount of fertilizers added to increase soil fertility is washed off through the irrigation, rainfall and drainage, and ultimately reaches the river. These pollute the water and make it toxic. Fertilizer contains chemicals that causes water pollution. Farmers are used fertilizers in their

agricultural field to increase their crops production when its raining chemicals in the fertilizers are flew into water. These leads to water pollution. Fertilizer contains nutrients such as nitrogen and phosphorus. Excess amount of nutrients leads to algal growth. These algae uses oxygen in water. So this is harmful for human body.

5. Redioactive Wastes :

Redioactive wastes enter into the bodies in various ways, eg. Processing of uranium ore, wastes from radio isotopes using research laboratories, waster from hospitals using radio isotopes, wastes water released from nuclear power station or wastes generated druing nuclear weapon testing.

6. Thermal Pollution :

Thermal pollution, sometimes called ‘thermal enrichment’ is the degradation of water quantity by any process that changes ambient water temperature. A common cause of thermal pollution is the use of water as a coolant by power plants and industrial manufactures.

7. Oil :

Pollution arising from oil spillage is not only dangerous, but for reaching in its consequences. Oceans are polluted by oil on a daily basis from oil spills, routine shipping, run offs and dmping. Oil spills make up about 12% of the oil that lenters the ocean. The rest come from shipping travel, drains and dumping.

Pesticides and herbicides, eutrophication are most important sources of water pollution in India.

Conclusion

Water pollution is a change in the quality and composition of water, directly or indirectly as a result of man’s activities. So that it becomes unsitable for drinking, domestic, recreational and agricultural purposes. Most rivers of India are highly polluted, but river Ganga tops the list. Control of water pollution involves three important steps : (i) removal of suspended large

particies (ii) supply of aeration to promote bacterial decomposition and (iii) chemical treatments for sewage treatment oxidation ponds are quite useful.

References

- 1) Bhalla, G.S., Peter Hazell, and John Kerr, Prospects for Indias Cereal Supply and Demand to 2020, 2020 Brief no. 63, International Food Policy Research Institutite, Washington
- 2) S.A. Alrymman, A.E. Kott, M.A. Keshsk, Water Pollution : Source and Treatment, American Journal of Environmental Engineering, Vol.6, Issue 3, Pp. 88-98 Posted 2016
- 3) R.H. Coose, The Problem of Social Cause, Journal of Law and Economics, Volume 3, P.1-44
- 4) A.K. Dasgupte, M.N. Murthy, Economic Evaluation of Water Pollution, Abatement : A Case Study of Paper and Pulp Industry in India.
- 5) S.Kumar, H.M. Meena, K. Verma, Water Pollution in India : Its Impact on the Human Health : Causes and Remedies, International Journal of Applied Environemental Sciences, Volume 12, Issue 2, P.275-279.