

# Water Pollution: A Study of Environmental Issue

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#### Abstract

The developmental activities such as construction, transportation and manufacturing produce large amount of wastes that leads to pollution of air, water, soil, and land as well as global warming and acid rains. Water pollution is a result of industrial and certain domestic activity, and it damages not only our environment but also human health. Today the growth of population increasing rapidly in the world and it leads to increasing in consumption of water resource. Indoor domestic activities and uses of different products create sufficient amount of water pollution, which could not be harmful to human and environmental health. Therefore in this paper will focused about the water pollution, major causes, their effects and remedies as a suggestion for reduce water pollution for human health. This paper concludes that the awareness can be taken about the control water pollution for better future health of coming generation.

*Key Words: - Water pollution, energy consumption, domestic activity.* 

#### 1. Introduction:-

Today environmental degradation is important issues of global warming. Environmental degradation is a process through which the natural environment is compromise in some way, and leads to reducing biological diversity and the general health of the environment. This process can be entirely natural in origin and can be caused by human activities. There are a number of ways in which environmental degradation can work. Pollution is one of the major causes of environmental degradation. Air, water, and soil are all resources which are depletion through overuse. Modern societies suffer from a diversity of problems related to the environmental aspects. These problems concern to the availability of clean water and unpolluted air, healthy food, personal and public health and well-being as well as biodiversity conservation. Water pollution is one of the cause of these problems lay in the way individuals as well as entire societies. Today water pollution are causing by us under the different domestic activities. According to the WHO about Three million people drinking their water as much as polluted and 40 lakh peoples death was related to the water pollution.

#### 2. **Objective: -**

The present investigation deals to study of the water pollution and discuss about environmental degradation as a man made calamities and its causes, solutions, and suggestion.



### 3. Data Base and Methodology:-

The present study is based on primary and secondary data. The secondary data obtained from the international disaster database and published and unpublished materials. The primary data collect from observation especially causes and their effects of water pollution.

### 4. Significance of the Study:-

The environment is an important factor influencing the health status of individuals. This includes characteristics of the natural and cultural environment. Factors such as clean air, water and adequate housing all have play to contribute to good health. Some studies have shown that a lack of healthy drinking water leads to lower levels of personal satisfaction and health. Facing water pollution problems is a complex procedure for human health. And it is necessary to study of their causes, consequences and their management. Therefore to the development of alternative solutions is immense significance.

#### 5. The Concept of Pollution:-

There are a large range of activities that can lead to pollution environmental harm. The word pollution includes to the any direct or indirect alteration in any of the components of environment which is harmful to any living and non living organism. Scientifically, the pollution is defined as 'any undesirable change in the physical, chemical or biological characteristics of natural water, air or soil, which can adversely affect the life any living and non living things'. (Samant 2005)

#### 6. Classification of Pollution:-

The pollution can be categories into two categories depending on the origin and its causes as 1) natural pollution 2) manmade pollution. The natural pollution caused by volcanic eruption and atmospheric dust. Whereas, manmade pollution caused by the dumping unhealthy materials by different manmade activities. Generally pollution is grouped in four major categories depending on nature of pollutants and affecting components as 1) Air Pollution, 2) Water Pollution, 3) Land Pollution and 4) Noise Pollution.

#### 7. Water Pollution:-

Pollution is significant component of environmental degradation, which started when humans began industrial waste and domestic activity. All these alter the chemical composition of the natural water, and increase in the global concentrations of chemicals in stream, river, lake and ocean. Water pollution is defined as the imbalance in natural quality of water due to the presence of various unnecessary polluting factors which are responsible to adverse effect on the living and non living organism on the earth. Water pollution can occurs when any type of chemicals, micro-organism or toxic contaminates are appear in an ocean, river, lake and other body of water. there is wide range of water pollutant sources The several personal care and house cleaning products, building materials, painting colours, wood products and furniture, building materials office machines and a variety of other products used in daily activities also includes in this list (WHO 2005).

#### 8. Sources of Water Pollution:-

Humans are main source of water pollution by dumping sewage and waste water from industry as well as house hold activity. The water pollutants may include liquid



droplets, and solid particles due to the human activities. The water pollutants change to natural water into the pollutant water. Sources of pollutants can be classified into following manner. A) Industrial waste water, B) Sewage and waste water, C) Oil leakage, D) Agriculture waste water, E) Urban waste water, F) Plastic material, G) Radioactive waste.

# A. Industrial Waste :-

Industrial waste water includes water that used for different industrial activity and became unusable in natural manner. Different industrial activity can carry a range of polluted water, salts, chemicals, grease, oils and debris in the natural water sources like as river, lake and seas. This had resulted into the polluted water results in diseases and illnesses for humans.

# B. Sewage Waste Water:-

Sewage waste water is used for several household activities as well as commercial, industrial activity. The household activity includes toilets, showers and sinks. Whereas industrial and commercial activity have leads to storm water runoff called as waste water. Sewage transported waste water into the natural source of water. Therefore the natural water had turn into the polluted water and harmful for humans, animals, and living organs.

#### C. Leakage of Oil :-

Oceans are one of the good for transportation by water ways. Everyday millions tones of goods delivered by water ways from country to another country and account for majority of oil transported into the oceans by shipping. In fact, that the millions gallons of oil leakage in the oceans. The oil enters in the ocean cannot dissolve in the water but develops thick layer on the surface of the water body. This had turns into the harmful to fishes, marine birds and plants. This Polluted water useless for drinking and any other household activity. Sometime this water used by birds, animal and humans to drink, result into the illness and uncontrolled diseases.

# D. Agriculture Waste :-

Agricultural activities have wants lots of water and plays dominant role in water pollution. Around the world farmers are used large amount of fertilizers, pesticides, fungicides and organic matters. All these are release in large quantity into the water body. Many other agricultural wastes also dumped into the natural water sources as well as underground water channels. These harmful toxins are results not only illness but also deaths of human, birds and animals.

#### E. Urban Waste:-

Today the worlds are suffering rapid urban development and developmental activities have direct related to water pollution. Urban center have different factories and supply more employment opportunities leads to migration towards urban areas. The factories are dumping chemicals into the sewage, the different types of vehicles emissions leakage oils into the water. Densely populated urban area dumped large amount of polluted water from household use. This had resulted to polluted water.

#### F. Plastic Material:-

The plastic material is lightweight and non biodegradable material. The use of plastic material are ranging from all types of household material, cars, cloths and industrial packaging. The used plastic material like as bags and bottles washed away into the rivers,



lakes and also oceans. The plastic materials contain harmful chemical and this had dangerous to fish, birds, animals and human health.

# G. Radioactive Waste:-

The developmental activities like as factories used radioactive materials. Sometime radioactive materials not deposed properly and release into the sewage and travelled to the water body. If can people are come into the with radioactive materials, this radiation increases health risk and damage DNA and tissues. This had resulted into the birth defects, genetic disorders.

# 9. Water Pollution and Our Health:-

The pollutants found in water are responsible for many harmful health effects. The effects may show up immediately like as hepatitis, cholera, diyariya and related diseases. Water pollution reduces oxygen amounts, results more growth bacteria in the water. Most of these diseases can be treated as nevertheless and serious risks. Other health problems may appear either year after single and repeated exposures. Sometimes a group of people have the cause of the illness cannot be found. According to the health report of WHO polluted water marked infections to the peoples are more as compare drinking fresh water. Sometimes the water pollution marked destruction of ecosystem and food chains is other effects of water pollution. The polluted water kills organisms like as fish, birds, and many other animals and their habitat which are depend on these water bodies. The water pollution has dangerous for environment as well as human health.

# 10. Suggestion for Reduce Water Pollution:-

To avoid problems due to water pollution, we can take following necessary steps to minimize the harmful effects.

- 1) Today wastage water is global issue and conservation and saving water is our first aim.
- 2) To reduce water pollution we can treat wastes before dumping in the water.
- 3) By using environmental friendly products we can reduce water pollution caused by households.
- 4) To reduce pollution of water we can reduce plastic material and reuse of such material.
- 5) We can dispose properly non biodegradable items and chemicals.
- 6) The farmers can reduce farms runoff and utilize erosion to retain soils in the farms.
- 7) To reduce urban water sewage local bodies used different type of storm water management techniques.
- 8) The industries can used water recycle techniques before dumping sewage.
- 9) Use household products according to manufacturer's directions. Throw away unused containers safely and keep out of reach of children and animals.
- 10) Choose non-toxic, non-volatile house hold materials.
- 11) Use pesticides in recommended amounts and keeping children away from pesticides.
- 12) Provide necessary technical education and specific training for the personnel risk and prevention in the environments by National Health Service.



13) Provide health education of the population and doctors, architects and building related professions helps to reduce water pollution.

# 11. Conclusion:-

The fresh drinking water is more precious for human health. The available of clean water is grateful for various human activities. Water pollution is one of the major problems in developing and developed country related to health problems. The effective environmental portion polices will immense benefit to extension of better human health. We should take all necessary precautions to minimize the harmful effects of water pollution. Finally it is concludes that the awareness can be taken about the control water pollution for better future health of coming generation.

# **References:-**

- 1. Etzel R. A. (2001): '*Water pollutants in homes and schools*'. Pediatric clinics of North America, Pp. 21-35.
- **2.** Kirk R. Smith, and Mirjam Maeusezahl (2005): 'Water pollution danger at environment degradation', Pp. 1-13.
- **3.** Rana S. V. (2006): 'Energy, Ecology and Environment' Rawat publication, Pp. 1-167.
- 4. **Report of Govt. India (2014):** *Central pollution control board ministry of environment & forests, govt. of India',* report on environmental issue. Pp. 1-47.
- **5. Samant J. S. (2005):** *'Environment Studies' published by shivaji university, Kolhapur, Pp. 5-42.*
- 6. Smith and Zhang (2003). 'Water pollution' The journal 'Eljanuar' Pp. 1-20
- 7. World Health Organization (2000): 'Water pollution in developing countries: a major environmental and public health challenge'. Bulletin of the WHO. Pp. 1-29.
- 8. World Health Organization (2002): '*The health effects of water pollution exposure in developing countries*'. based on the who consultation on the Geneva,
- **9.** World Health Organization (2006): *'Fuel for life: household energy and health',* world health report.
- 10. World Health Organization. www. Who. Water Pollution /publications.
- **11.** World Health Report (2008): 'Children's Health and the Environment WHO Training Package for the Health Sector', world health report.