

Impact of Water Pollution on Environment

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Abstract:

The addition of various kind of pollutant and nutrient through a various agencies like sewage, industrial effluents, agricultural runoff, mining, municipal solid waste etc. in the water bodies, bring about a series of change in the quality of water. Which have been the subject of several investigation, Fresh water resources is becoming day by day at the faster rate of deterioration of the water quality is now a worldwide problem, (Mahemanda et. al., 2005). Global population is expected to rich 07 billion by the year 2013, which warrant escalating pollution load in the environment through human activity. The present investigation about a water pollution, which carry a serious disease like, chicken pox, fever, leukemia, cancer is a worldwide problem.

Keyword: - pollutant, industrial effluent, mining, serious disease.

Introduction:

Much of the current concern regards to environmental quality is focused on water because of its importance in maintaining the human health and health of ecosystem. Fresh water is finite resource, essential for agriculture industry and even in human existence, without fresh water of adequate quantity and quality sustainable development will not be possible, (Kumar, 1997).

Water is important source of life. Different pollutant when mix to this water, water remains contaminated. Contamination of water due to their human behavior and civilization. Human play important role for sustainable development, but they pollute the environment. They change the base system of ecosystem, thus pollutant degraded in to ecosystem; we saw the effect on long time in ecosystem.

The addition of various kind of pollutant through the various agencies like sewage, industrial effluent, agriculture runoff, mining, in to the water of river, lake, pond, and various water resources. They degraded in to water ecosystem and causes a deficiencies in life system, intermingled to food chain, they come from source of food, vegetable and drinking water such type of pollutant insert in the metabolism of human and other biotic component of ecosystem, they cause a serious disease in human life. The present study investigated that how much quantity and quality of water contaminated in ecosystem. There physicochemical parameter were determined.

Material and Methods:

All the representative water sample was collected in clean phosphate free polyethylene bottle that have been pre washed with dilute water. Physicochemical parameter were determined using slandered procedure, (ICMR, Manual 1977), Trivedy and Goel (1986). Alkalinity was determined by titrating a known volume of water sample with 0.02M HCl. Dissolve oxygen (DO) was determined by Winkler titration, Total dissolved solids (TDS) was determined gravimetrically by evaporating known volume of water to dryness in a pre-weighed crucible on a steam bath. Total hardness was determined by titrating with EDTA using Enrichment block T. indicator.

Sampling Location

Wet side of River (cattle grazing)

Near bank of river (fecal contamination)

Upper land nearby river (Agriculture remodeling)



Result and Discussion:

Total hardness of water 216-222mg/l, Total dissolve solid 401-406 mg/l. it appear that river water sample tested where not exceeding the desirable limit for drinking . the high alkalinity indicate pollution ,which causes mainly due to OH, CO₃, HCO₃, ions is the ability to change the PH of water. Phosphate is considered amongst the primary limiting nutrient in pond and lake. DO can favor the anaerobic decomposition of organic waste and carbonaceous material to contaminate water. High value of carbon dissolve in water which clearly indicate the pollution of water, as tested later. Such type of hard pollutant and chemical like carbonaceous, florin, Phenapthalin, phenol, are come in the form of residue from sewage disposal, industrial waste, mining waste mix rain water or other source and mix them in to the river water, pond and lake. They contaminate land water and produced Bacteria, Fungi and many disease, they degraded in Environment, For grazing, drinking, of water remain polluted, They are come from a different source in metabolism. They slowly come from to in a human genus due to metabolism. Such pollution occur form air, soil, water. They insert to the ecosystem. They impact to whole bio system. They change the base system of ecosystem. They effect on long time in ecosystem. and causes serious disease in human being.

Table. 1-

Parameter	BSI Limit	S1	S2	S3	S4	Mean
TH	200-600	222	230	227	249	222
TDS	500-2000	409	397	405	400	405
Total Alkalinity	200-600	361	340	370	364	340
Phosphate	-	0.071	0.089	0.040	0.082	0.070
DO	-	6.9	7.2	7.9	8.2	7.0

All parameter express in mg/ml

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