



Impact Of Plastic On Water Bodies At RIICO Area In Taranagar Tehsil Of Churu District (Rajasthan)

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ABSTRACT-

Water is an essential environmental factor which is necessary for survival of all organisms which exist on the earth. In history, many times it was considered by greatest scientists in world that “the water is life”. Life cannot develop on any planet without water availability. It is the responsibility of mankind to keep it pure and conserve for next generations. But water is being polluted by humans in many ways. Many such products which are made by humans for public interest polluted water directly and indirectly. One of these a terrible product is plastic. Due to lack of awareness plastic reach at water bodies and get to start polluted them. Polluted water is not fit for human uses. Plastic bags, bottles and other products flow with water and reach at large water bodies.

KEYWORDS-

Water, water bodies, Pollution, Environment, Plastic, Human etc.

INTRODUCTION-

In human history many innovation are done by human for public interest. All innovation proved useful to mankind. An innovation has both beneficial and harmful aspects. One of all them plastic is a terrible product when it is not uses in a right and controlled way. After uses it released in environment by human and takes a terrible form for healthy environment. Once plastic spread out in nature it reaches at water bodies and starts to pollute natural environment. Plastic is a polymer of ethylene molecule and degradable products of human population. It maintain in environment for long time. It makes changes in quality of water, air, soil etc. and play broad role in pollution.

Pollution is an undesirable change in the physical, chemical or biological characteristic of our air; land and water that may or will harmfully affect human life or that of desirable species, our industrial processes, living condition and cultural assets (Odum, 1976). A product consider as a pollutant when it cross a threshold level in nature and alter the quality of environmental factors like- air, water and soil. Pollutant can be considered in two types- Natural and Synthetic pollutant. Plastic is man-made or synthetic pollutant. After human use it

cannot disposal in proper way and being a reason for pollution of environment. In other words, pollution is the unfavourable alteration of our environment, largely as a result of human activities (Southwick, 1976).

OBJECTIVES-

- To increase scientific knowledge about plastic pollution and its impact.
- To know the current status of water pollution in this region.
- Aware to people about artificial environment pollution which direct or indirect causes by societies.
- To bring the message of a healthy ecosystem to the public.

REGION AND AREAS-

Rajasthan is a largest state of India. It situated in north-west of India. Its geographical location is 23.3 to 30.12 North latitude and 69.30 to 78.17 East longitudes. It covers 3, 42,239 sq.km.of India's total geographical area. The state shares a border with Pakistan. It is bordered with five Indian states like Punjab, Haryana, U.P., M.P. and Gujarat. It includes the ruins of the Indus valley civilization at kalibangan and Balathal. The Thar Desert is known as Great Indian Desert. Rajasthan covers 60% portion of the Thar Desert. This Desert is spread over 12 districts of Rajasthan. Such as Barmer, Bikaner, Churu, Jaisalmer, Jalore, etc. Churu district cover a part of Great Indian Desert. Churu is Northeast in Rajasthan and sharing a boarder with Haryana state. It believes that it was a village of Jats known as Khalera ka Bas. Churu covers 13,858 square km of India's area. A blackbuck sanctuary known as Tal chhapar sanctuary are situated here. The region boasts record temperatures ranging from below freezing point in the winters to over 50 degrees in the summer afternoon. There are 8 tehsils in the district such as Churu, Taranagar, Sujangarh, Ratangarh, Saradarshar, Rajgarh, Bidarsar, and Sidhmukh.

Taranagar is a city and a block in Churu district. It situated at 28.41'N to 75.3'E. Taranagar was earlier known as Reni named for the lady Rankali. It renamed by maharaja Ganga Singh for in honour of the king Tara Singh. The town Taranagar is surrounded by large numbers of villages on all side. Here a developing RIICO area is situated near nursery on Bikaner- Rajghar road. There are many small and medium factories, school and ITI College situated. Riico area faces municipality wastes and stagnation of dirty water.

MATERIALS AND METHODS-

The study was conducted in July to mid-September month. Author visit field area after the sunrise, mid-day and before the sunset.

The study was done by direct observation, photography and sampling methods. Author direct observe still water, plastic waste and foul smelling water. Water sample collected by author for some laboratory test like estimation of pH, water hardness and alkalinity from RIICO area. To collection of water sample use sample bottles.

The estimation of water pH is done by digital pH meter. For hardness and alkalinity titration method used in laboratory of Botany department of MJD college Taranagar by author.

RESULT-

The present study was conducted at RICCO are of Taranagar tehsil of Churu district for 2 to 3 months. The researcher done 4 to 5 test for each test pH, hardness and alkalinity of water. And the end result which is mention here is average of all results and shown in increase or decrease as compare to fresh water.



Figure: 1, 2- Showing plastic garbage at water bodies in RIICO region.

The author found that plastic polluted water has lesser p^H , alkalinity and hardness compares to fresh water. And the p^H is found acidic in nature.

In the study it is resulted that the plastic blocked the small water drains as well as large water drains. Plastic bags and garbage block the forged and cause water stagnation in area. Later the common properties of water colour, smell and temperature are altered. It is turned in to badly smelled and black colour. People suffer during passing through this area and at the time of their work field.

In study area the stagnation water is important place for sheltering of mostly disease causing insect vectors. So most of people who are habituated nearby area and work here have high transmission of seasonal infection compare to those people who lives in city area.

CONCLUSION –

This research work develop awareness in people towards water pollution and to keep it clean and pure for human uses. It also attract the intention of government and societies on excessive uses of plastic and plastic pollution. This helps in making the environment healthy through public awareness. Due to plastic garbage and plastics wastes water bodies affect negatively and later also pollute air of that area.

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