
Seasonal Variations Studies in Various Physico-Chemical and Biological Parameters

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ABSTRACT

In modern era, water pollution becomes a major problem. Excessive sewage of city and villages, agriculture chemicals like fertilizers and pesticides of villages and industrial run off in river which pollute riverside biosphere. It is affects the lives of plants and animals including humans or other living organisms and also affects the water quality of river. Present work focused on the quality of river Ramganga water and total 13 physico-chemical and 1 biological parameter have been tested and analyzed. The results of one year study of three seasons are presented in this paper. The study showed that COD ranging between 28.6 to 77.40mg/l as highest value which show industrial pollution and DO ranging between 2.925 to 7 mg/l which is indicate to organic pollution as mild.

Keyword: Water pollution, River Ram Ganga, Water quality parameters, Biosphere, DO, COD.

INTRODUCTION

Water quality problems have arisen due to urban settlement, rising industrial development and rapidly increasing water demand. In India, 90% of the quality of river water is an indiscriminate manner due to the urban sewage falling in rivers. Garbage falling from urban settlements is usually biological and can be judged as to how the quality of water of river Ramganga will be affected. The dirty water falling from industrial units and the amount of dangerous chemical elements can be reduced even against urban sewer, but it has a profound and serious impact on the health of the river Ramganga. Garbage and dirty water coming from industrial units is so dangerous that river Ramganga cannot even clear it in the way of its impact. Untreated domestic waste into the rivers through sewage, outfalls drains act. There are no facilities of sewage treatment in any town of Uttar Pradesh (Chandra et.al, 2011). According to Times Of India news, "Untreated effluents are allegedly being discharged

into the Ramganga river through local drains, posing a risk to public health and environment. Hearing a petition, the National Green Tribunal (NGT) on Friday directed Central Pollution Control Board (CPCB) and Uttar Pradesh Pollution Control Board (UPPCB) to conduct joint inspection of two plants-Marya Frozen Agro Foods, a slaughterhouse and camphor and Allied products, which manufactures fine chemicals. A Moradabad-based businessman, Anil Kumar Singhal, had filed a petition with the NGT in 2015 claiming that 23 big drains in Moradabad and 10 in Bareilly were discharging untreated sewage into Ramganga. The three-part study is being conducted by Dr. Neelima Gupta, a Faculty member of M.J.P. Rohilkhand University along with Uttar Pradesh Council for Agricultural Research (UPCAR). During its second phase, which was concluded in May, 2016, it was found that 33.3% of the fish in Ramganga had parasitic infection. The researcher warned of lead penetrating into human beings through food chains could cause learning disabilities impaired protein and severe anaemia while cadmium could cause renal failure and other

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