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Evaluation of Water Quality from Various Sources in Selar Bilaspur Chhattisgarh.

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ABSTRACT

This study focuses on the comprehensive estimation of water quality across multiple sources. The water simple under investigation include those collected from river local pond and hand pump. The primary objective of this research are to access the chemical composition physical characteristics, and overall suitability for various propose of this water sources. In this investigation key parameters such as PH, dissolve oxygen (DO), Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD)and concentration of essential ions and pollutants were sample were Compared against established water quality standards to determine the potential risks and Usability of each source. The kharun River water sample demonstrate distinct Characteristics influenced By its Natural Origin. By evaluating and comparing these different water sources. Communities can make informed choices for sustainable water resource Utilization ,addressing potential health and environment Concerns.

Keywords:- Beakar , water sample ,DO,BOD,COD,TDS, PH ,digital machine.

Introduction

India is Facing a Serious problem of Natural resource Scarcity. Especially that of water in view of population growth and economic Development most of Fresh water bodies all over the ould are getting polluted. Thus decreasing the potability of water. All life is depend on water and exists in Nature in many forms like River. Pound Handpump water etc.

Sample 1. Extracted from Khatun river in chhattisgarh kharun river Originates from petechua in the southeast of the district and after flowing 80km.

Sample 2. The Second Sample. Procured from a pound is indicative of the conditions Stagnant water bodies.

Sample 3. The third Sample in Hand pump water, and This water is treated and processed water that is distributed to households. Which serves as a standard for water quality assessment.

DO Meter

Review literature

According to Md. Alim Miah et al. (2015) the Study was conducted to assess the physical and chemical water quality parameters of jamuna River. From the Result was found that river water is suitable for irrigation.

According to Mustapha et al. (2013) study shows the collection water Samples in triplicate and analyzed for physiochemical variables. An analysis was conducted to access the relation of water quality measles and reveals a Signifying relation Between dissolved oxygen (DO) conductivity with dissolved solids and BOD-5 and chemical oxygen demand (COD).

Aim:- Estimation of water quality from various sources.

Objective:- collection of water samples from different sources.

Study Area

Sample 1. the river village seler Panchayat belha is situated in Bilaspur district**.**

Sample 2. Local pound of village seller district Bilaspur latitude 22171687 and longitude 82.227311

Sample 3. Hand pump of village Selar district Bilaspur latitude 22.171653 and longitude 82.227311.

Material and Methods

After taking water in incubation bottle, it is kept in incubator and a magnetic stirrer is put inside the bottle. The magnetic stirrer continuously rotates inside the bottle. Then with the help of DO meter 3 readings have been noted, first reading has been taken at the bottom, second at mid point and third at top of the bottle. Now the average of the readings will give the dissolved oxygen present in the water sample.

Result and discussion :-

Section for water quality analysis here's a general template you can adapt based on your specific data. This section typically includes summaries of measured parameters comparisons with standards and interpretation.

Result After Adding water

Sample	Tem	Ph	DO	BOD	COD
River	29.1	7.2	6.6	5.2	16.5
Pond water	32.4	8.3	9.5	9.5	23.5
Tap water	28	6.3	7.1	4.4	10

Conclusion

In Conclusion. The estimation of water quality from Various sources through the analysis of four distinct Samples allows us to gain insights into the Complex interplay Between human activities and the environment. The kharun River, Local pond. fop Hand pump, and The ganga water availability and quality. Through a comprehensive analysis of physiochemical attributes. pollutants and geographical influence. This research not only provides essential 3 data For informed decision- making but also Underscores the urgency of adopting measures that ensure the Sustainable management and preservation of water resources. As we move forward.

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