Impact of water pollution on human ecology in the Kelani river

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Abstract

Water pollution is one of the main topics of the urban environment in Colombo, Sri Lanka's capital. The city of Colombo is Sri Lanka's most densely populated area and the population of the Kelani River is very high. The main purpose of this study is to identify the impact of directly changing the environment on human beings. For this study, the area from the Peliyagoda Bridge to the estuary of the Kelani River is selected and 25 water samples from this zone are to be examined. The tests to be performed are the three parameters of water valence (pH), biochemical oxygen demand(BOD), and dissolve oxygen (DO). Primary data and secondary data will be used for this research. Primary data will be used for this purpose through water sample collection, interviews and field observations. Secondary data is also expected to be used in books, journals, research, reports, etc. The new ArcGIS 10.2 software will be used primarily to analyze the data collected, with the main focus being its interpolation methodology (IDW), which will be used also (BUFFER, CLIP) to the main methodology. The results of the above research will be analyzed using Microsoft Excel. The people of this area are suffering from various health problems due to water pollution. The soil of the paddy fields in the river has also been acidified. The human ecological approach to physical geography was used to conduct this research.

Keywords: water pollution, human ecology

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