

STUDY OF THE IMPACT OF WATER POLLUTION ON MEDA ELA (Middle canal) IN KANDY CITY, SRI LANKA

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Meda Ela is a major urban drain running through the city of Kandy, originating from the Kandy spillway, flowing south-west adjacent to William Gopalle Mawatha, and discharging into the Mahaweli River at Gatambe. Meda Ela is one of the most polluted tributary of the Mahaweli River in Sri Lanka and contributes significantly to the pollution of the Mahaweli River. The water has become polluted due to the accumulation of sewage in the canal from various sources. About 375 families live on both sides of the Meda Ela. The total population near the canal is about 1250. Due to the effects of water pollution, these people have become victims of vector-borne diseases like dengue and chikungunya. In the same way, these people suffer from the danger of floods during the rainy season and bad smells during the dry season. The main objective of this study is to identify the sources of pollution that affect Middle Canal pollution and to identify the impact of water pollution on the community around the Middle Canal. Moreover, the other objective is to identify the measures to be taken to reduce water pollution in the Middle Canal. This research was conducted by studying secondary sources under the qualitative data collection research method. According to those sources, urbanization, a lack of responsibilities among departments, institutions, and authorities for maintenance and protection, a lack of a proper system, to dispose of waste, and a lack of proper knowledge of the effects of water pollution among the local people have caused the pollution of the Middle Canal. Therefore, preparing programs to educate the community about the possible effects of water source pollution, implementing strict laws against the community that does not dispose of waste properly, strengthening the responsibilities of departments and institutions, preparing a formal system for properly disposing of waste and wastewater, and developing recycling facilities are Water pollution in the middle canal can be reduced. Therefore, a strong relationship between the community and other stakeholders should be created to prepare an effective management plan to protect the Middle Canal and its catchment area.

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