

## **Sustainable Solutions for Drinking Water Problem in the City of Matara**

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This study emphasizes how to give a sustainable solution for drinking water problems and how to manage water resources in the Matara city using a sustainable water management system. The main objectives of this research are to identify drinking water issues, identify the main causes behind drinking water issues and suggest sustainable ways to protect drinking water resources in Matara Municipal Council Area because it has been the main hub of Development plan of Matara District. A mixed methodology has been applied for the research. Both Primary and secondary data were collected to achieve the research objectives. A questionnaire survey and interviews have been conducted. Beside them, secondary data sources such as maps, institutional data, and previous research reports will be referred for higher accuracy. According to the first part of the research has identified the major issues of drinking water in the City of Matara, The River Nilwala is the main source for the supply of pipe born water for the Matara municipal area. Water is taken for treatment at the intakes of Nadugala, Kadduwa and Balukawala pumping station to the treatment plants at Nadugala and Malimbada and treated in conformity with the prescribed standards. The treated water is then delivered by the storage tanks. Seventeen water tanks supply water to Matara. People who lived in the Matara Municipal Council area they don't have the volume of water needed for daily consumption. A major aspect of the water crisis in Matara that purified drinking water is used for every kind of water requirement of households. The population growth in the Matara town is expected to increase in the future and the water resources should increase. Clean drinking water is the well-being in terms of health and economy. Ensuring access to clean water service is the first step in eliminating poverty and essential for the overall economic and social development of a country. Therefore in the second step will focus on sustainable solutions for the drinking water issue of the City of Matara.

Keywords: Water, Sustainability, Management, Population, The City of Matara

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