

Covid-19 Implications on Achieving SDG 6 Targets in Sri Lanka under Global Water Agenda

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Sri Lanka achieved SDG 6.1 by 89.4% and 6.2 by 95.8%, respectively, considering the percentages accessing drinking water and sanitation services. Since Covid-19 infused government revenues have declined below the threshold expenditure (18.6% GDP), efficient public service inputs are expected to avert an overall economic crisis. A structured questionnaire survey was conducted in the dry zone to test the SDG targets. The output compares rural households (RH) and township dwellers (TD) while it analyses the interferences under a quasi-cultural context. SDG 6.1 implies 45% of the TD have access to safely managed drinking water but only 4% for RH. For target 6.2, 45% of the TD have access to safely managed sanitation services, whereas RH has 4%. Basic sanitation services are unavailable to 31% of women. The income and educational levels show positive correlations; $R^2=0.97$ and 0.99 with SDG 6.1 and $R^2=0.98$ and 0.81 with SDG 6.2, respectively. SDG 6.3 indicates that 32% of TD are disposing of their wastewater through methodical purifications, whereas RH covers only 7%. However, 65% of TD dispose wastewater into drains, contrary to 97% of RH into plants. For SDG 6.4, the domestic per capita water requirement varies from 80-110 L/day. Though the social water stress index ensures water sufficiency for the country by 2030, Covid-19 has negatively affected all aspects of HDI; income, health, and education, which indirectly lead to unsustainability and water stress. In addition, the ratio of withdrawal to availability exceeds 40% in the dry zone implying severe scarcity. SDG 6.5 and 6.6 highlighted the importance of indigenous water management systems to achieve sustainability. With the expected climatic change, authorities should ensure safe water and hygienic sanitation services to minimize diseases. The vulnerable communities faced with diversified water issues under Covid-19, need a socio-technically adapted efficient framework to achieve SDG 6.

Keywords: SDG 6, Covid-19, Water stress index, Dry zone, Climate change