

## Documents

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**Sponge Town: Addressing Water Crisis for Future Urban Development in Malaysia**  
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**Abstract**

According to United Nation, water crisis could affect 5 billion people by 2050 due to climate change, increased demand and polluted supplies. The main issue of the water crisis is rapid increasing of population and rapid urbanization; the water catchment area is decreasing due to deforestation for development. The aim of the project is to address the water crisis for the future development by the propose Sponge Town in every district of Kuala Lumpur which is to create water sensitive and sustainable master plan with storm water collection, rainwater harvesting, and atmospheric water harvesting design. The project proposal has the potential to minimize the water supply from the centralized water treatment plant, minimize the water disruption case in future and minimize the non-revenue water as well as flash flood. The design targets 100% usage of rainwater, storm water and atmospheric water as portable water supply as well as to increase the awareness of water conservation in public. © 2023, The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd.

**Author Keywords**

Atmospheric water; Deforestation; Storm water; Urbanization; Water crisis; Water sustainable plan

**Index Keywords**

Catchments, Climate change, Deforestation, Storms, Urban growth, Water conservation, Water treatment; Atmospheric water, Malaysia, Rapid urbanizations, Stormwaters, Sustainable plan, United Nations, Urban development, Urbanization, Water crisis, Water sustainable plan; Water supply

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