

## Performance of Consuming Clean Water in Sri Lanka as a Sustainable Development Goal

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**Goal 06:** Ensure availability and sustainable management of water and sanitation for all

### 1. Introduction

Sustainable Development Goals (SDGs) were introduced to Sri Lanka in 2015 by The United Nations with 17 goals. These goals are planned to achieve by 2030 and thereby the countries expect to achieve the sustainable development. The 6<sup>th</sup> goal of these SDGs is to ‘Ensure the availability and sustainable management of water and sanitation for all’ ( Ministry of Sustainable Development, Wildlife and Regional Development, 2018).

Clean water and sanitation goal is being achieved with 8 targets (World Health Organization & UNICEF, 2017). By 2021, in Sri Lanka this goal has been identified as a moderately improving goal which has major challenges. 50% of households in all the districts of Sri Lanka have covered with safe drinking water in 2016 ( Ministry of Sustainable Development, Wildlife and Regional Development, 2018).

Previously, studies have been conducted regarding to water management in several areas in Sri Lanka in achieving sustainable development goals. Those studies are limited to small villages or small-scale water tanks in Sri Lanka. It will be an obstacle in identifying the overall status of this sixth goal and then this study focuses on whole districts in Sri Lanka. Further, the challenges and the solutions on this goal are paid attention un this study and it will be useful in overcome those challenges in future. Then this study is conducted with the problem of what are the trends of providing clean water in Sri Lanka.

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## **2. Research Objectives**

The main objective is to Identifying the trends of consuming clean water in Sri Lanka after introducing SDGs and Identifying the challenges and suggesting solutions for them is the specific objective.

## **3. Materials and Methods**

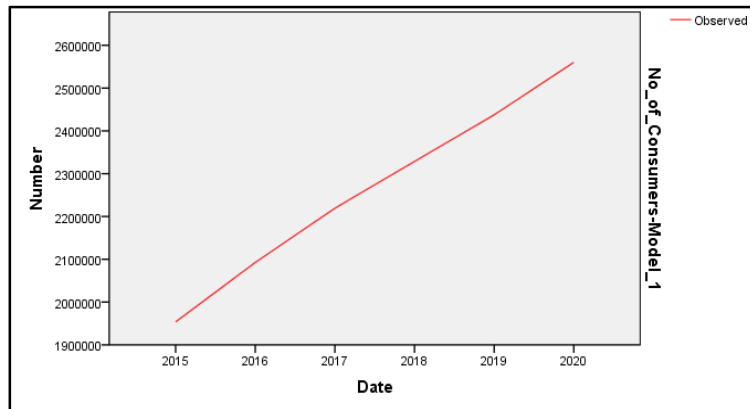
For this research, to identify the trend of consuming clean water, data on the number of water consumers and quantity of water available are gathered from 2015 to 2020 province wise as secondary data. As this research based on secondary data, all water consumers in Sri Lanka from 2015 to 2020 were considered. Further, challenges and future implementations also are studied as secondary data and for those previous studies and relevant report are used. In gathering secondary data, reports named Economic and Social Statistics of Sri Lanka published by Central Bank of Sri Lanka and Voluntary National Review Report are used.

The collected data on water consumers and quantity of consumed water are analyzed by using time series analysis through SPSS. Further to identify the relationships, chi square test is used.

## **4. Results and Discussion**

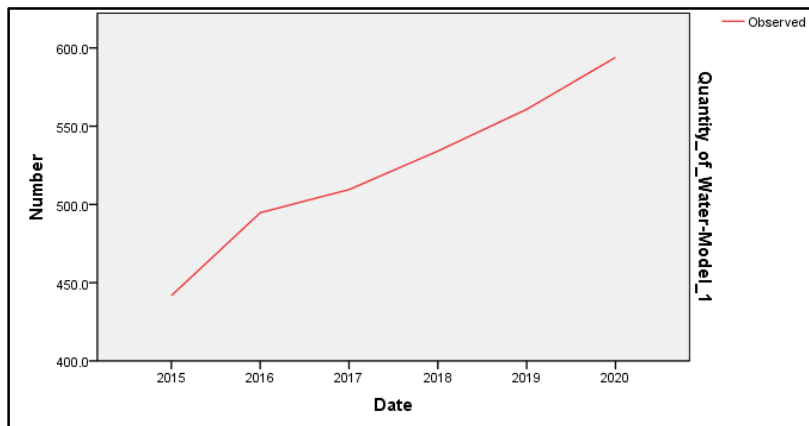
As the findings of this research show, the number of domestic water consumers has increased from 1,953,721 to 2,560,237 during the period from 2015 to 2020 in Sri Lanka. On the other hand, the quantity of water available also has increased from 441.7 m<sup>3</sup> Mn. to 594 m<sup>3</sup> Mn. in that period (Central Bank of Sri Lanka, 2015 to 2020). The result of Time Series analysis can be indicated as follows.

Figure 1: Time series analysis on number of water consumers



Source: Author Developed, 2022

Figure 2: Time series analysis on quantity of consumed water.



Source: Author Developed, 2022

Thereby, it can be concluded that the consumption of clean water has been increased after introducing SDGs. Further, the quantity of consumed clean water has a growth since 2015 to 2020. Then it can be predicted that the number of clean water consumers and quantity of consumed clean water will increase in coming years, reaching the goal.

According to the Sustainable Development Report of 2021, the 6<sup>th</sup> goal has been identified as a moderately improving goal. But there are some challenges also. There is an issue on the quality of water specially in North Central and Northern Province which are agricultural areas because the people suffer from chronic kidney disease due to using low

quality water. In solving these problems, relevant parties are taking necessary actions such as expanding the pipe borne water supply coverage, providing the piped water facilities for the areas affected by kidney diseases, ensuring quality of water by 100%, fulfilling the water requirements for industries by 100%, and taking necessary measures to ensure the efficiency of supplying drinking water facilities.

## References

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World Health Organization and UNICEF. (2017). *ONE DROP*. Retrieved on 16<sup>th</sup> April, 2022, from [www.onedrop.org: https://www.onedrop.org/en/news/everything-about-the-sustainable-development-goal-6-clean-water-and-sanitation/?gclid=cjwkcajw9qitbhbbeiwap-ge0r\\_wgoa\\_barf\\_b7\\_ksz3\\_whbxl8wpdjanceezn\\_wtzrnhh13uxtyslharoc10oqavd\\_bwe](https://www.onedrop.org/en/news/everything-about-the-sustainable-development-goal-6-clean-water-and-sanitation/?gclid=cjwkcajw9qitbhbbeiwap-ge0r_wgoa_barf_b7_ksz3_whbxl8wpdjanceezn_wtzrnhh13uxtyslharoc10oqavd_bwe)