Measuring the performance of National Water Supply service in Sri Lanka

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By

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ABSTRACT

Overall Performance Indicator (OPI) can be defined as a technique to determine how effectively and efficiently delivers the required service. It examines both the quantitative and qualitative aspects of an agency's functioning. The NWSDB measures its performance by using several partial productivity ratios such as piped water connected coverage %, Non Revenue Water %, Staff per thousand connections etc. When computing those ratios, average analysis and simple ratio measures are used. S.V. Berg says in his Water Utility Benchmarking book, these partial measures are generally available for well-managed companies, and provide the simplest way to perform comparisons, trend direct attention to potential problem areas. Policymakers often combine the specific core indices to create an OPI, generally using a weighted average of core indices. Thus, an OPI provides a summary index that can be used to communicate relative performance to a wide audience. This study is focus to develop OPI for the National Water Supply and Drainage Board Sri Lanka. It applies techniques such as Ordinary Least Square (OLS) (Univariate and multivariate regression analysis), Simple ratio analysis, Percentage analysis and weighted average analysis to measure the performance and develop the overall performance indicator to the National Water Service in Sri Lanka. Meanwhile an OLS technique is easy to use and simple to interpret. Descriptive statistic which is generated from regression analysis is given clear idea for the variables used in measuring performance and the cause of variation in performance. Finally, it incorporates financial, operational and socio-economic aspects and generates an index for overall performance by considering Pearson correlation figure ($R2$) and weighted average method. Panel data which was collected from relating to 11 RSCs of the NWSDB is used to develop the OPI.

Keywords: Overall Performance Indicator (OPI); Ordenary Least Square (OLS); Simple ratio analysis, Percentage analysis; National Water Supply and Drainage Board (NWSDB).