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TRENDS AND FORECASTING
OF
ELECTRICITY CONSUMPTION IN SRI LANKA

A PROJECT REPORT PRESENTED

BY

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ABSTRACT

The study is based on the production and use of electricity (1977-1997) data. There were three main groups of electricity users namely, Domestic, Commercial and Industrial. Data was collected from Census and Statistics Department, Colombo.

The Objectives of this study are to investigate the trend patterns of number of consumers and energy consumed by each category: Domestic, Commercial and Industrial Users , Investigate suitable models for number of consumers in Domestic, Commercial and Industrial user categories and Energy Consumed by each category and Forecast number of consumers in Domestic, Commercial and Industrial user categories for year 1998 to year 2000.

Three modeling procedures are used namely; ARIMA Modeling, Log transformation and Exponential Smoothing Modeling. After finding the best fitted model to each series, values for year 1998- year 2000 were forecasted.

The expected number of Consumers in year 2000 by each category: Domestic, Commercial and Industrial are 2208664, 256454 and 27083 respectively. The expected number of KWh consumed by each category in year 2000: Domestic, Commercial and Industrial are 1761541, 778439 and 1668273 respectively. The percentage increase of electricity consumption from year 1998 to 1999 and from year 1999 to 2000 is approximately equal for every category.