ABSTRACT

The most important source of energy is electricity and consumption and demand is increasing day-by-day. Electricity consumption is directly related with the increase in population; as the population increases the consumption of electricity also increases. Today Pakistan is facing a lot of crises in which on the top is energy crisis. All across Pakistan people are facing a shortfall of 5,300 MW which causes a long duration of load shedding in rural as well as urban areas. Policy makers are working on it disquieting situation and in order to cope this situation near future policies are in pipe line.

In the present study, we have developed time series models and by using these we made forecast for electricity consumption in LESCO region of Pakistan. For this purpose we used ARMA and ARIMA modeling techniques; moreover GARCH-effect is also tested. We also observe the hidden factors which may cause load shedding and directly related with the increase in electricity consumption. We also found a clear relationship between weather conditions and electricity consumption.