2.7 Forecasting of gasoline demand in Sudan

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Gasoline also locally called benzene is the most extensive used fuel oil in Sudan. The major demand for gasoline is transportation sector. Sudan has a surplus of gasoline produced in the local refinery. However, the demand is growing, as import and local production of gasoline driven motors is increasing. This study is aimed to forecast demand on gasoline for the period 2015-2030. Historical data on gasoline supply and demand in the period 2000-2014 is obtained from annual reports of Sudan central bank and ministry of oil and gas. The supply data is cross checked by the report from Khartoum Refinery Corporation (KRC). Two forecasting models are used: Trend model and econometric model. The econometric model is gross domestic product (GDP), population and gasoline prices dependent while the trend model is time series dependent only. The international prices of gasoline are considered rather than local prices as the local prices are subsidized and hence are not sensitive to international market of supply and demand. The econometric model shows larger future demand than trend model. Even though, it is possible that the forecasts could still be at the lower end of the future gasoline demand. To suppress the demand, energy conservation measures of transportation shifts to public transport rather than private vehicle is a potential tool. Besides transportation shift, Sudan needs to improve its road and railway networks to suppress the demand in gasoline.