## ABSTRACT

Access to electricity and connectivity has been a challenge facing informal settlements despite being receptors of new migrants to urban areas and cities. The electricity grid in Kibera is poorly connected, leaving many households and SMEs without formal power connectivity. The study sought to assess the status, connectivity challenges and planning interventions that could be applied towards universal connectivity in Kibera. The study used open and closed ended questionnaires to interview 161 households and 150 business premises. Key informant interviews and focus group discussions were conducted for the vulnerable women and youth groups. The study found that 84.9% of the households had electricity compared to 79.3% of the business premises. Electricity connection rate for both businesses and households was high along the main roads where electricity lines run and lower into the interior of the slum. There were both formal and illegal connections in the study area. Illegal connections were higher at households than for business at 6.1 and 4.2 percent respectively. High electricity connection fees and huge monthly bills were the major challenges to electricity connection in Silanga. Other notable challenges to power connectivity were the poor and unplanned housing structure layout, poor land tenure systems, denial of wayleaves consents and inaccessible of the network due to the narrow streets. The study recommends subsidization of slum electrification programs, lower connectivity fees paid in instalments, relax application rules and through public participation and stakeholders' engagement upgrade the slums.