

The Nexus between Information and Communication Technology (ICT), Electricity Access, Governance and Human Development: Evidence from Asia- Pacific Countries

ABSTRACT

The Asia-Pacific region has recorded the sharpest increase in human development progress globally and has seen shrinking gaps in basic standards and capabilities. However, inequalities around technology remain a cause for concern for the region, especially when countries with lower human development reportedly have limited access to technologies compared to countries with higher human development. Therefore, this study investigated the effects of information and communication technology (ICT), electricity access, and governance on human development in the Asia-Pacific region. A panel dataset of 46 countries from 2010 to 2019 was estimated using the Driscoll–Kraay standard error regression approach. Our findings revealed that ICT has a strong positive impact on human development for countries with high and medium human development. Internet usage is particularly significantly correlated with human development for both country groups, while mobile cellular subscriptions emerged as significant only for countries with high human development. The study also revealed significant positive effects of electricity access and governance on human development. The findings suggest that increased ICT adoption and electricity access, coupled with good governance, are crucial in improving people's quality of life, thereby promoting greater human development. Limitations of the study include omission of the low human development group and a limited number of indicators used to measure ICT and governance.