

## **Impact of Energy Use on Women Empowerment in Bangladesh: An Empirical Analysis**

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*Energy is considered as the lifeblood of the economy and an essential input for almost every good and service. Energy plays a decisive role in the development process of a country. It not only enhances the productivity of factors of production, but also promotes higher living standards (Amin 2015). Many researchers have discussed about the relationship between energy and women empowerment. Harbison and Robinson (1985), Amin and Mahmud (2017) addressed the relationship between rural electrification and fertility change. Barkat et al. (2002) had also found that electrified homes had a higher literacy rate for both men and women compared to non-electrified Bangladeshi homes. Bangladesh has achieved success in energy sector during 2009-2019 and it helps the country to improve the socio economic condition of the women. However, to the best of our knowledge, there are no empirical time series studies which explicitly address the relationship between Electrification and Women Empowerment. For an emerging country like Bangladesh where women's work is often undervalued and society is biased towards men, the relationship between electrification and women empowerment may have an immense impact on the society. This paper investigates the impact of electrification on women empowerment. Increasing electrification among Bangladeshi population might result in empowering women in the society. To implore this relationship, Augmented Dickey Fuller (ADF), Phillips-Perron (PP), Johansen Fisher Cointegration estimator methods have been used. Moreover, the Granger causality test, Vector Error Correction Model (VECM), Dynamic Ordinary Least Squares (DOLS) tests have also been applied to study this relationship. Our results reveal that, energy use has the potential impact on female labor force both in long run and short run in Bangladesh. Moreover, it has also an effective impact on female literacy rate in the long run. So access to adequate electricity can provide the opportunity of employment creation to the poor female. In order to do so Bangladesh government should put more attention to the development of off-grid electrification for the betterment of the unprivileged rural women.*

**Field of Research:** Economics