African Coaching Science (Social/Education)

Green Energy Micro-Grids and Economic Development in Kenyan Villages: A Study

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Abstract

Green energy micro-grids have been introduced in several African villages to address the challenges of unreliable electricity supply and promote sustainable economic development. A quantitative survey approach was employed, collecting data from a sample of households across selected villages. The survey covered questions related to household income, expenditure, energy usage, and perceptions regarding the impact of micro-grids on their daily lives. There was an observed increase in average monthly electricity consumption by 20% among households using green energy micro-grids compared to those without such systems, indicating a positive shift towards more efficient energy use. The study concludes that the introduction of green energy micro-grids has had noticeable economic benefits for Kenyan villagers, particularly through enhanced energy efficiency and reduced reliance on traditional, less reliable sources of power. Based on these findings, it is recommended that governments and development organizations continue to support the expansion of green energy micro-grid initiatives in rural areas to further boost economic opportunities and improve quality of life. Green Energy Micro-Grids, Economic Development, Rural Villages, Energy Consumption Changes, Kenyan Context

Keywords: *African, Geographic, Energy, Microgrids, Sustainability, Development, Consumption*

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