

South Sudan Rural Electrification Project



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Abstract

Electricity is a rare commodity in the two year old independent country of South Sudan, in fact, less than one percent of the population have access. The use of diesel generators is the norm in urban areas, whereas the rural areas are virtually absent of electricity outside of flashlights, candles, and lamps. Without electricity, rural residents endure personal hardships that are hard to imagine in societies that take persistent and affordable electricity for granted. In South Sudan when it gets dark, students cannot study, shops must close, and essential tasks like cooking must be performed in the dark. Village Help for South Sudan seeks to contribute to the development and advancement of South Sudan by supporting the delivery of electricity to rural off-grid households with no current access to electricity.

Presented will be our piloting of a market based sustainable approach to providing electricity to the rural communities of South Sudan. Elaborated upon will be the adopted model from Community Solutions Initiatives (CSI) of using renewable energy for power generation and the revolutionary system of using batteries for distribution. Also discussed will be some of the prohibitive obstacles that stand in the way such as the cost of photovoltaic modules, the high cost of deep cycle batteries, and the logistics of transportation to a country with the no infrastructure. The model for micro grid systems in the market areas to deliver electricity to shopkeepers is also explored. With sustainability being the driving force behind our rural electrification model, I will discuss how we are planning to be sustainable by using in country assembly plants and recycling batteries.