

Benefits of LED lighting –efforts by Kwality in India

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Lighting systems using Power LEDs are addressing socio–economic and environmental problems on both a regional and global scale. The beneficiaries are the most poor of the world with no access to adequate lighting. The benefit of LED lighting technology becomes most evident with significantly improved living conditions, enhanced safety and health conditions, improved environment, ability to read and study after sundown and operate cottage industry by night.

Health & Safety

As per SELF Newsletter, 2002, The effects of fuel–based lighting are serious and debilitating for the developing world. Being a primary lighting fuel, kerosene causes heavy local and indoor air pollution resulting in illnesses and death. Acute respiratory infections such as influenza and pneumonia kill nearly 2 million children in developing nations each year.

Also, kerosene and candles are responsible for countless fire catastrophes every year. In India alone, 2.5 million people (350,000 of them children) suffer severe burns each year, primarily due to overturned kerosene lamps. Each year, many homes burn to the ground when a lamp is toppled.

Safe, reliable and near permanent LED lighting provided by Kwality (<http://LED–ecolight.page.tl>) reduces air pollution in the home enhancing safety and improving health conditions. Each village where kerosene lamps were replaced with Kwality systems has reported significant improvements of air quality in their homes. Mobile LED lighting has also allowed safe field access after dark (irrigation needs, elephant/human conflict etc.).

Local Business Opportunities

Microenterprise development is a fundamental component of Kwality's philosophy and approach. Conventional project delivery combined with a local business start–up meets the twin demands of reaching a very poor segment of the population while simultaneously reinforcing entrepreneurship as one of the most effective and sustainable forms of local development. Through this approach Kwality ensures that installation, maintenance and support services continue to replicate after the initial projects have seeded the technology. Kwality does not

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own any of these companies but will assist in their startup, development of expertise and sustainability.

A typical microenterprise operates as an independent Social Enterprise that enhances income for the family operators and presently provides full-time employment for three technicians. Community members benefit as they can purchase lighting systems and receive install