



Solar Lantern Evaluation At a Glance

Experimentation in Product Evaluation: The Case of Solar Lanterns in Uganda

Research & Approach

CITE researchers conducted over **300 interviews** to evaluate **11 types of solar lanterns** using a 3-S Framework:

Suitability: How well does the product work?

Scalability: Can the supply chain & distribution of the product be effectively scaled?

Sustainability: Do people continue to use the product over time given social, economic & environmental context?

Access the full
evaluation report
by scanning the QR code
or visiting cite.mit.edu.



What's In the Report?

- A Consumer Reports-style Solar Lantern Comparative Rating Chart featuring solar lantern brands SunKing, WakaWaka, d.light, Firefly, ASE Solar, and UnitetoLight (*Suitability*)
- In-depth supply chain analysis, Supply Chain Feature & Attribute Assessment Charts (*Scalability*)
- In-depth analysis of Solar Sister as a key player in Uganda's solar lantern market (*Sustainability*)

How Are the Solar Lanterns Evaluated?

Each solar lantern is given a **rating score from 0 to 100** based on how the product's **attributes** and **features** fared.

Attributes: Characteristics common & central to solar lanterns like brightness, runtime, and time to charge

Features: Characteristics common, but less central to solar lanterns like ability to charge a cell phone

Noteworthy Findings

- A solar lantern's ability to charge a cell phone was one of the most crucial features to the users surveyed.
- For users surveyed, the number one barrier to adoption was cost. Users cannot afford the product, and microfinance options are limited.
- Users surveyed lack confidence in the product based on poor experiences with other solar lanterns in the past.

Putting CITE's Results to Work

CITE continues to refine its evaluation process to make it leaner, cheaper, and more efficient for development professionals who must make tough purchasing decisions with limited time and budget. In 2015, CITE will publish its results on a water filter evaluation, and evaluate water test kits, post-harvest storage technologies, malaria rapid diagnostic tests, and educational technologies.

About the Comprehensive Initiative on Technology Evaluation

The Comprehensive Initiative on Technology Evaluation (CITE) is establishing a rigorous methodology for evaluating technologies to help donors and policymakers identify and invest in the best solutions. **Read the full report at cite.mit.edu.**

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