



Smart LED Street Lighting Project in Odisha

Challenge

Koraput and Kalahandi—two remote, tribal-dominated districts in Odisha—faced persistent infrastructure gaps in public lighting. Most Gram Panchayats lacked functional streetlights, leading to safety concerns, limited mobility after dark, and reduced community engagement. The terrain added further complexity, making logistics and timely execution difficult. To address this, the Zilla Parishads of both districts launched a large-scale project to implement energy-efficient LED street lighting across 550 villages—under a time-bound, cost-effective framework. Funded under the 15th Finance Commission, the initiative aimed to deliver sustainable lighting infrastructure that could improve safety, enable social activities, and support rural development. The success of this project depended on rapid deployment, reliable technology, and long-term maintenance—challenges that required precision execution and a strong implementation partner.

Solution

Raminfo was contracted to execute this critical initiative under a turnkey model—spanning the design, supply, installation, testing, and commissioning of LED systems, along with a one-year warranty and five years of Annual Maintenance Contract (AMC).

Here's how we delivered:

- **Cluster-Based Deployment:** Each village was equipped with a cluster of 10 LED streetlights installed on existing LT poles, ensuring rapid scalability and minimal civil disruption.
- **Smart Lighting Infrastructure:** High-lumen, energy-efficient LED lights were paired with photo switches, timers, and tamper-proof energy meters to enable automated operation and remote monitoring.
- **Integrated Logistics and Execution:** Detailed surveys were conducted and field teams liaised with DISCOM authorities for inspections, ensuring smooth coordination and adherence to electrical safety norms.
- **Sustained Service Commitment:** As part of the five-year AMC, local support systems were set up in Koraput & Kalahandi to address complaints, maintain uptime, and ensure spare availability—committing to issue resolution within 7 days.



Impact

The successful execution of the LED street lighting project across **550 villages** in Koraput and Kalahandi has transformed the night-time landscape of rural Odisha. For communities that once lived in near-total darkness after dusk, this project delivered tangible, lasting change. Villagers now experience safer streets, improved mobility, and renewed civic confidence—particularly for women, children, and daily-wage workers who rely on secure movement during evening hours.

Key outcomes of the project include:

- Enhanced public safety and extended hours for social and economic activity
- Significant reduction in kerosene lamp usage and informal lighting setups
- Lower energy consumption and carbon footprint through LED efficiency
- Greater visibility for local governance through labelled, high-impact public assets
- Strengthened rural infrastructure aligned with the Government's Smart Village objectives

Raminfo's execution of the LED street lighting project showcases how technology, when paired with strong public collaboration, can drive lasting community impact. By delivering reliable infrastructure and long-term service, we're proud to contribute to safer, more connected, and energy-efficient rural communities—reinforcing our commitment to public-sector transformation.