

## SMART STREET LIGHTS

Design and Innovation Center

PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur

Email: [gauravprajapati@iiitdmj.ac.in](mailto:gauravprajapati@iiitdmj.ac.in), Contact No. +917772962675

### Introduction

No doubt, switching to LED Street Lights has reduced power consumption. Still, more of power savings can be achieved using automation through Microcontroller and Sensors.



Fig. LED Street Lights

### Innovation

- Can save up to **66%** of power after midnight
- Dynamic and Real time input
- Fully Automated

*Dimmed Light (25% Brightness)*



**Case 1:**  
Before Object (Human/  
Vehicle) approaches the light  
pole

**Case 2:**  
When Object is in  
Sensor's range



*Again Dimmed Light*



**Case 3:**  
When Object  
comes out of  
Sensor's range

### Impact Outreach and Adoption

- Cost can be easily recovered in very 1<sup>st</sup> year of installation
- Reduction in overall power consumption
- Small circuit easily can be fitted inside pole
- Existing LED street lights can also be retrofitted

तकनीकी संस्थानों का ज्ञान  
Knowledge of Technical Institutions

स्वैच्छिक संगठनों का अनुभव  
Experience of Voluntary Organisations

सरकार के संसाधन  
Resources of Government

सभी को मिलाकर गांवों के विकास के लिए  
Converging all these together for Rural Development