The aim of automated streetlight management system using IOT is the conservation of energy by reducing electricity wastage as well as to reduce the manpower. Streetlights are the elemental part of any city since it facilitates better night visions, secure roads, and exposure to public areas but it consumes a quite large proportion of electricity. In the manual streetlight system lights it’s powered from sunset to sunrise with maximum intensity even when there is sufficient light available. This energy wastage can be avoided by switching off lights automatically. The saved energy can be efficiently utilized for other purposes like residential, commercial, transportation etc. This can be achieved using an IOT enabled streetlight management system. The project uses Light Emitting Diodes (LED) that does not consume an enormous amount of electricity to replace the power consuming traditional HID lamps. LED lights along with LDR enable the intensity variation which is infeasible with the HID lamps. As LEDs are directional light sources it can emit light in specific direction thereby optimizing the efficiency of the street lights. This system includes an additional DHT11 Temperature-Humidity sensor. This provides the exact temperature and humidity of a particular region. DHT11 is a composite sensor that contains a calibrated digital signal output of the temperature and humidity. It ensures high reliability and excellent long-term stability. This work is implemented using a programmed Arduino board for providing the required intensity of light at various times. The proposed work has achieved a better performance compared to the existing system. In conclusion I would like to say that the main aim is to cut down the energy wastage that our country is finding difficult to tackle by developing this automated street light this can be achieved.