

First noise pollution, now light pollution *Disturbed biological clock can play havoc*



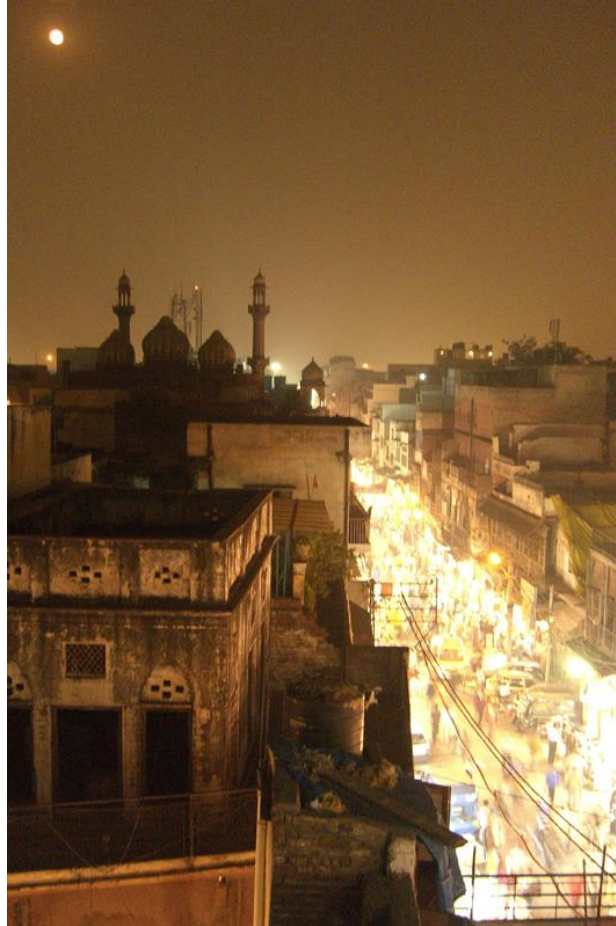
India like other countries world over is falling prey to one of the lesser known, but equally grave, type of pollution caused by none other than light! The first to notice the problem were astronomers whose task of observing stars and planets became more difficult in the backdrop of an over illuminated sky and they began shifting their observatories to places further and further away from urban areas.

"When the first observational facilities of the 20th century were coming up in India they were being shifted far away from cities. The observatory in Hyderabad shifted to Rangapur, and the Indian Institute of astrophysics set up an observatory at Hanle, in the Himalayas," N Ratnashree, director, Nehru Planetarium said.

"The Uttar Pradesh State Observatory - shifted its location from Varanasi and set up an observatory at Nainital but the location became so polluted with light that the new telescope of this observatory, which is the largest in India, is now being built far away at Devsthal," she says.

Now, a pair of Berlin-based filmmakers have revealed in a new film the adverse effect of artificial light emissions during night also called "sky glow" on not just astronomers but insects and migratory birds as well as turtles which are killed by light which alters the natural framework of their lives and disturbs their sense of direction.

"Light pollution has dangerous consequences and is dramatically increasing. Plant growth is dangerously disrupted. Many organisms' biological clocks are unbalanced," reveals the documentary, which would be screened at the upcoming CMS Vatavaran Environmental films in the capital.



Prolonged exposure to artificial light during the night can cause psychosomatic disturbances and breast cancer among women," shows Anja Freyhoff who has partnered with Thomas Uhlmann for the film. The film also breaks down conventional notion that more light means better safety. "It has been recorded that 150 bn nocturnal insects die every year in Germany alone. Research proves that insects are attracted to bright street lamps at night and as they swarm close to the lamps they are dazzled, scorched and burnt," says Gerhard Eisenbers, a zoologist in Berlin.

As two-thirds of all bird species migrate at night artificial light confuses birds. It has been found out that in North America, a billion birds are killed every year after colliding with skyscrapers. Different centres like Italy's Light Pollution Science and Technology Institute have been monitoring images sent via satellite to gauge the amount of night pollution. Recently the Nehru Planetarium launched a programme involving school children to measure light pollution in India (TNN 20 September 2009).