

## **Rising Light pollution**

### **Why in news?**

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Earth's artificially lit outdoor surface at night grew by about 2%, resulting in increasing light pollution.

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### **What is light pollution?**

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- Light pollution, also known as photo pollution, is the presence of anthropogenic light in the night environment.

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- It is exacerbated by excessive, misdirected or obtrusive uses of light, but even carefully used light fundamentally alters natural conditions.

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- As a major side-effect of urbanization, it is blamed for compromising health, disrupting ecosystems and spoiling aesthetic environments.

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# With light pollution & without



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## **What are the consequences of Light pollution?**

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- Light pollution has ecological consequences, with natural light cycles disrupted by artificial light introduced into the night time environment.  
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- Increased sky glow can affect human sleep  
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- In addition to threatening 30 percent of vertebrates that are nocturnal and over 60 percent of invertebrates that are nocturnal, artificial light also affects plants and microorganisms.  
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- It threatens biodiversity through changed night habits, such as reproduction or migration patterns, of many different species: insects, amphibians, fish, birds, bats and other animals.”  
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## **What does recent data imply?**

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- Every year earth is getting brighter than earlier years, it underscores the concerns about the ecological effects of light pollution on people and animals.

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- The rate of growth observed in developing countries was much faster than in already brightly lit rich countries.

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- With few exceptions, growth in night time light was observed throughout South America, Africa and Asia.

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- Light remained stable in only a few countries, although the researchers said the satellite sensor's blindness to some LED light may mask an actual increase.

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- Eg. Australia's lit area decreased due to wildfires. Night time light declined in War-hit Syrian and Yemen.

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### **What are the reasons of increasing light pollution?**

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- US National Oceanic and Atmospheric Administration weather satellite data may understate the situation because its sensor cannot detect some of the LED lighting that is becoming more widespread, specifically blue light.

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- Experts had hoped the growing use of highly efficient LED lighting might lessen energy usage worldwide.

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- The new findings indicate use of artificial lighting instead is growing, increasing energy demand.

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- City transitions of its street lighting from sodium lamps to LED, indicates that savings in energy are being offset by either new or brighter lights in other places.

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**Source: Live mint**

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