



## 1. A new research analysis explains why India must curb the burning of solid fuels urgently

- Why should solid fuels be avoided?
- What is Household Air Pollution and how dangerous is it?
- How many people use solid fuels in India?
- What are the study's recommendations?

**GS paper 3 (Environmental impact assessment)**

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**In this video, you can find detailed answers for all the above questions.**

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Rudra Mani Tripathi. ( 2019, August , 20). Explained: Why the Pradhan Mantri Ujjwala Yojana was a timely policy intervention. Indian Express. Retrieved from <https://indianexpress.com/article/explained/ujjwala-yojana-india-clean-fuel-air-pollution-5917902/>



## What is the context about?



A study published by the Collaborative Clean Air Policy Centre states that the single greatest contributor to air pollution in India is the burning of solid fuels in households.



According to a summary of seven research papers published in Ideas for India on August 19, the burning of such solid fuels, like firewood, impacts the health of household members and accounts for somewhere between 22% to 52% of all ambient air pollution in India.



The study postulates that, based on this evidence, switching to cleaner fuels such as LPG for household use will have a dramatic impact on pollution levels and health problems due to pollution.



## Why should solid fuels be avoided?



Firewood, animal dung, and agricultural waste are some of the fuels commonly used in households across India as a means of generating energy for cooking, light, and heating, among other things.



One of the many pollutants produced on the burning of such solid fuels is fine particulate matter. Fine particulate matter refers to particles or droplets with a diameter of 2.5 micrometres (0.000001 metres) or less, and is also known as PM<sub>2.5</sub>. Such particles can travel deep into the respiratory system, and exposure to them can cause several adverse health effects, both short-term and long-term, including respiratory problems and heart disease.



## What is Household Air Pollution and how dangerous is it?



The emissions of PM<sub>2.5</sub> generated by the burning of solid fuels in households is termed Household Air Pollution (HAP).



The study claims that approximately 800,000 premature deaths occur in India every year as a result of exposure to HAP indoors. Moreover, the HAP produced indoors travels outdoors, and becomes a contributor to ambient air pollution, with around 300,000 more premature deaths per year attributable to exposure to outdoor HAP.



The full impact of HAP is thus composed of the exposures to HAP  
1) inside and around a given house and  
2) from the household contribution to ambient air pollution,” states the study.



## How many people use solid fuels in India?



In states such as Bihar, Uttar Pradesh, Madhya Pradesh, Orissa, Jharkhand, Rajasthan, Chattisgarh and Assam, around 72.1% of the population regularly uses solid fuels.

### What are the study's recommendations?



The study asserts that immediate action is required to rectify the harm caused by HAP. It points to initiatives undertaken by the government of India to promote LPG for use in households as opposed to the traditionally used solid fuels, such as the Pradhan Mantri Ujjwala Yojana.



However, the study claims that more effort is required, in particular, increasing the use of electricity as a substitute in these scenarios, and ensuring that the use of LPG is sustained.