

# **Mains Practice Question**

**Q.** Air pollution is a transboundary problem, it transcends rural and urban boundaries. But the issue of air pollution in rural India is rarely discussed and action plans are rigid. Analyse. (150 words)

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### **Approach**

- Begin with a brief Introduction
- Enumerate various Sources of pollution in rural areas
- Discuss the associated challenges to address the issue
- Conclude by suggesting mitigation strategies

#### Introduction

Air pollution in India is generally perceived as a problem of the cities and by the cities quite predictably, solutions have been designed for the cities. Initiatives to alleviate poor air remain conspicuously absent in rural areas. Air pollution is a transboundary problem and airsheds stretch over entire districts and states, transcending rural and urban boundaries. But this is rarely discussed.

### **Body**

#### Sources of pollution in rural areas

- The arena in which the rural population is most severely disadvantaged than their urban counterparts is indoor air pollution. Usage of solid fuel continues to plague rural households and it disproportionately affects women and children.
- Most heavy industries now operate beyond city limits in rural belts and the local population is the recipient of toxic air and effluent discharge.
- Power plants some of which are in rural areas are not compliant as well, according to studies by Delhi-based think tank Centre for Science and Environment.
- According to The Energy and Resources Institute's air pollution inventory at the national scale, open burning of agricultural residue in rural areas contributes about seven per cent to the total PM2.5 emissions.
- Agriculture is a rich source of reactive nitrogen in India, as only 30 per cent of the nitrogen is taken up by plants. The rest is released into the atmosphere, soil and water.

### Challenges

- India has 804 manual monitoring stations under the National Ambient Monitoring Programme and 274 real-time monitoring stations. Most of these are disproportionately located in tier-1 cities; a few are in tier-2 cities.
- Real-time monitoring is nearly absent in rural areas. Additionally, even cities in Arunachal Pradesh, Andaman and Nicobar Islands and Manipur don't have a single real-time monitoring station.
- Pradhan Mantri Ujjwala Yojana, aimed at shifting poor households from biomass to clean liquified petroleum gas (LPG) but, LPG costs are a major deterrent to adoption and that even in households where LPG is used, fuel stacking—using biomass fuels alongside LPG—is common.

• Empirical evidence from rural India shows that the energy ladder hypothesis—Households move towards modern energy sources as their incomes rise—often doesn't hold true.

## Mitigation strategies

- Expand the monitoring network to include rural areas.
- Prepare a roadmap on how violations of existing emission norms should be addressed.
- Aware rural females on the advantages of using clean cooking fuels.

