

JR IDP Problem Statement - FY

On 7th February 2021, A flash flood was triggered in the Chamoli district of Uttarakhand. About 38 people are confirmed to be killed and many are missing.

The main cause of flood was breaking of a part of Nanda Devi Glacier. According to scientists, Climate change has an indirect impact on melting of glacier. Pollution in air can lead to climate change. India has the most polluted cities in the world.

Emissions from vehicles have a significant contribution to Air pollution. In this Lockdown, on 1st April 2020, Government of India imposed new emission norms popularly known as 'Bharat Stage 6 Norms' all over India.

The central government has mandated that vehicle makers must manufacture, sell and register only BS-VI vehicles. These norms specify the maximum permissible emission limit for carbon monoxide (CO), hydrocarbons (HC), nitrous oxides (NO_x) and particulate matter (PM).

In order to meet these requirements some strategies are adopted like

1. Oil refineries have switched to clean fuel as per the BS-6 norms. This is the world's cleanest fuel.
2. Selective Catalytic Reduction (SCR) device is installed in exhaust system of vehicles. As a result, prices of auto-mobiles and fuels have gone up.

What we need you to do?

- 1) Find what are the permissible emission limits as per Bharat Stage 6 Norms?
- 2) How are BS-6 norms different than BS-4 norms?
- 3) Which are the other sources responsible for climate change?
- 4) Which catalysts are used in SCR device?
- 5) Diesel vehicles have become more expensive than petrol vehicles. Why do you think is that the case? How one can reduce the cost of vehicles?
- 6) Develop an innovative method to meet these BS-6 norms?
- 7) As a responsible citizen of our nation, how will you deal with climate change?

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Tip – Keep Abstract Submissions in Round 1 to one page only. Go through the rules and rounds format PDF for more information