GOVERNMENT OF INDIA MINISTRY OF PETROLEUM & NATURAL GAS **RAJYA SABHA UNSTARRED QUESTION NO. 145** ANSWERED ON 03/02/2025

COAL BED METHANE AND CLIMATE CHANGE

145. SHRI DEREK O' BRIEN:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) whether it is a fact that leakage of coal bed methane can be a major cause of global heating and thus also a major cause of global warming;
- (b) if so, the details thereof;
- (c) whether Government has conducted any study to assess issues related to coal bed methane leakage in the country;
- (d) if so, findings of such a study and if not, the reasons therefor; and
- (e) the current status of coal bed methane reserves in the country in terms of the number of such reserves explored and the extraction of methane from such reserves; State-wise?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS (SHRI SURESH GOPI)

(a) to (d): Methane has an impact as a greenhouse gas through emissions due to unscientific handling of production process which can lead to its leakage in the environment. Coal Bed Methane (CBM) operations are designed to extract methane from coal seams while employing advanced extraction and management techniques to capture methane at source and directing it in pipelines for commercial use as a source of energy. The concerned operators of the CBM fields conduct studies and prepare Field Development Plans in accordance with sound engineering, economic, safety and environmental principles, including prevention of leakages, for carrying out the development operations with minimal emissions. Use of technology, good international practices and continuous supervision have reduced the trace quantity of fugitive emissions (CBM flared) during well testing over time.

(e): The State-wise details of Coal Bed Methane reserves and details of production (till December 2024) is as under:

| No. | State | Estimated CBM | Gas Initially in | Production (till |
|-----|----------------|--------------------|------------------|------------------|
| | | resources (in BCM) | Place (in BCM) | December, 2024) |
| | | | | (in BCM) |
| 1 | Jharkhand | 722 | 56 | 0.08 |
| 2 | Rajasthan | 360 | 0 | 0 |
| 3 | Gujarat | 351 | 0 | 0 |
| 4 | Odisha | 244 | 0 | 0 |
| 5 | Chhattisgarh | 241 | 0 | 0 |
| 6 | Madhya Pradesh | 218 | 103 | 2.26 |
| 7 | West Bengal | 218 | 137 | 4.61 |
| 8 | Tamil Nadu | 105 | 0 | 0 |
| 9 | Telangana & | 99 | 0 | 0 |
| | Andhra Pradesh | | | |
| 10 | Maharashtra | 34 | 0 | 0 |
| 11 | Northeast | 9 | 0 | 0 |
| | Total | 2599 | 297 | 6.95 |

BCM: Billion Cubic Meter

Source: Directorate General of Hydrocarbons.
