GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 2001 TO BE ANSWERED ON 19.12.2022

Forest Fires

2001. SHRI ADALA PRABHAKARA REDDY:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the cases of forest fires in the country have increased during the last three years and if so, the details thereof, State-wise;
- (b) whether any study has been conducted to ascertain the causal factors for the fires and if so, the details and the outcome thereof and if not, the reasons therefor;
- (c) whether any survey has been undertaken to estimate the loss of flora and fauna due to the fires and if so, the details thereof and if not, the reasons therefor; and
- (d) the steps taken by the Government to curb the recurrence of forest fires?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI ASHWINI KUMAR CHOUBEY)

- (a) & (b) The number of incidences of forest fire in the country varies from year to year depending on various natural and anthropogenic reasons. Forest fires do occur every year during summer due to various natural and anthropogenic reasons including accumulation of inflammable materials such as dry leaves, twigs, pine needles etc. These factors have also been highlighted in a joint study by Ministry of Environment, Forest & Climate Change and the World Bank. Most of the forest fires in the country are ground fires in which ground vegetation etc. get burnt. Further, the Forest Survey of India (FSI), an organization under the Ministry disseminates the satellite based forest fire alerts to the State Forest Departments and other registered mobile users whenever forest fires are detected. The State/UT-wise number of forest fire detected by FSI using Moderate Resolution imaging Spectro-Radiometer (MODIS) sensor aboard Aqua & Terra satellites and SNPP-VIIRS (Suomi National Polar-orbiting Partnership Visible and Infrared Imager/Radiometer Suite) sensor in forest fire season during last three years is given in Annexure-I.
- (c)& (d) The Ministry through Indian Council of Forestry Research and Education (ICFRE) in collaboration with Forest Survey of India, Wildlife Institute of India, National

Institute of Hydrology and GB Pant National Institute of Himalayan Environment & Sustainable Development has conducted a pilot study on Estimation of Economic Losses in Real Term per Hectare basis due to Forest Fire in Uttarakhand and Madhya Pradesh to understand the long-term economic and ecological impacts of forest fires on flora and fauna. Further, Forest fire prevention and its management is primarily the responsibility of concerned State Governments /UT Administration and respective States/ UTs undertake various activities under the Centrally Sponsored Forest Fire Prevention and Management Scheme, Integrated Development of Wildlife, and under CAMPA fundsuch as creation and maintenance of fire lines and water conservation structures inside forest areas, procurement of firefighting equipment, awareness creation, and incentivizing villages/communities for protection against forest fire etc. In addition, the Ministry has constituted Central Monitoring Committee to review the preparedness of States/UTs regarding Forest Fire Management acrossthe country, and for overseeing the implementation of National Action Plan of Forest Fire.

Annexure-I

ANNEXURE REFERRED TO PART (A) OF THE LOK SABHA UNSTARRED QUESTION NO. 2001 DUE FOR REPLY ON 19.12.2022 REGARDING FOREST FIRES.

State/UT-wise number of forest fire detected by Forest Survey of India using MODIS & SNPP-VIIRS sensors in the last three years. (This includes large, continuous and repeated forest fires)

| S.No. | SA-A-NUT | MODIS Detections | | | SNPP-VIIRS Detections | | |
|--------|----------------------|-------------------------|-----------|----------|-----------------------|----------|-------------|
| | | Nov 2019 to Nov 2020 to | | Nov 2021 | Nov 2019 | Nov 2020 | Nov 2021 to |
| 5.110. | State/UT | June 2020 | June 2021 | to June | to June | to June | June 2022 |
| | | | | 2022 | 2020 | 2021 | |
| 1 | Andaman & Nicobar | 15 | 2 | 3 | 39 | 16 | 33 |
| 1 | Islands | 13 | 2 | 3 | 39 | 10 | 33 |
| 2 | Andhra Pradesh | 1,080 | 2,888 | 1,716 | 9,996 | 19,328 | 14,138 |
| 3 | Arunachal Pradesh | 660 | 1,109 | 1,116 | 1,786 | 3,914 | 3,449 |
| 4 | Assam | 3,000 | 3,387 | 2,305 | 8,924 | 10,718 | 8,158 |
| 5 | Bihar | 50 | 537 | 222 | 614 | 5,179 | 3,024 |
| 6 | Chandigarh | 0 | 0 | 0 | 2 | 0 | 0 |
| 7 | Chhattisgarh | 416 | 3,112 | 1,942 | 6,360 | 38,106 | 25,792 |
| 8 | Dadra & Nagar Haveli | 1 | 3 | 1 | 21 | 33 | 15 |
| 9 | Daman & Diu | 0 | 0 | 0 | 0 | 1 | 3 |
| 10 | Delhi | 3 | 5 | 5 | 21 | 14 | 3 |
| 11 | Goa | 4 | 10 | 5 | 47 | 45 | 20 |
| 12 | Gujarat | 202 | 422 | 236 | 2,770 | 3,803 | 2,769 |
| 13 | Haryana | 39 | 25 | 37 | 68 | 152 | 135 |
| 14 | Himachal Pradesh | 80 | 533 | 601 | 536 | 4,110 | 5,280 |
| 15 | Jammu & Kashmir | 62 | 131 | 524 | 438 | 1,098 | 4,282 |
| 13 | including Ladakh | | | | | | |
| 16 | Jharkhand | 101 | 1,563 | 630 | 2,613 | 21,713 | 9,419 |
| 17 | Karnataka | 538 | 932 | 800 | 4,232 | 5,784 | 4,973 |
| 18 | Kerala | 142 | 51 | 61 | 864 | 296 | 504 |
| 19 | Lakshadweep | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 | Madhya Pradesh | 1,383 | 7,103 | 3,908 | 9,537 | 47,795 | 32,728 |
| 21 | Maharashtra | 1,102 | 4,297 | 2,309 | 14,018 | 34,025 | 22,052 |
| 22 | Manipur | 2,475 | 3,252 | 1,638 | 8,800 | 10,457 | 5,544 |
| 23 | Meghalaya | 1,826 | 2,052 | 1,431 | 6,762 | 7,658 | 6,322 |
| 24 | Mizoram | 2,816 | 4,345 | 2,105 | 7,361 | 12,846 | 8,734 |
| 25 | Nagaland | 1,248 | 1,726 | 1,309 | 2,905 | 4,975 | 3,471 |
| 26 | Odisha | 1,326 | 5,307 | 2,086 | 10,602 | 51,968 | 22,014 |
| 27 | Puducherry | 1 | 1 | 0 | 0 | 1 | 0 |
| 28 | Punjab | 52 | 171 | 128 | 153 | 635 | 428 |
| 29 | Rajasthan | 420 | 447 | 238 | 3,461 | 3,402 | 2,703 |
| 30 | Sikkim | 5 | 17 | 11 | 47 | 63 | 26 |
| 31 | Tamil Nadu | 187 | 202 | 151 | 1,368 | 1,220 | 1,035 |
| 32 | Telangana | 1,042 | 2,566 | 1,372 | 12,132 | 18,237 | 13,737 |
| 33 | Tripura | 1,467 | 1,664 | 310 | 4,369 | 5,015 | 2,609 |
| 34 | Uttar Pradesh | 396 | 1,667 | 905 | 1,548 | 8,608 | 5,428 |
| 35 | Uttarakhand | 167 | 2,710 | 1,337 | 759 | 21,487 | 12,985 |
| 36 | West Bengal | 141 | 548 | 233 | 1,320 | 3,287 | 1,520 |
| | Total | 22,447 | 52,785 | 29,675 | 1,24,473 | 3,45,989 | 2,23,333 |