GOVERNMENT OF INDIA MINISTRY OF HEALTH AND FAMILY WELFARE DEPARTMENT OF HEALTH AND FAMILY WELFARE

RAJYA SABHA UNSTARRED QUESTION NO.2355 TO BE ANSWERED ON 16TH MARCH, 2021

POPULATION AFFECTED BY AIR POLLUTION IN DELHI

2355 DR. WANWEIROY KHARLUKHI:

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

- (a) whether Government is aware of all the diseases related to or caused by air pollution in Delhi and if so, the details thereof;
- (b) the number of people affected by diseases caused by or related to air pollution and the percentage of the total population;
- (c) the number of fatalities in Delhi arising from such diseases; and
- (d) the reasons behind extremely high pollution levels during the months of January and February?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI ASHWINI KUMAR CHOUBEY)

(a): Air pollution is known to be one of the aggravating factors for many respiratory ailments and cardiovascular disease. The exposure to air pollution is associated with breathing and respiratory problems, aggravation of existing respiratory and cardiovascular diseases, adverse effects on the immune system, damage to the lung tissue and carcinogenesis. Several epidemiological studies have shown an association between particulate air pollution and exacerbations of illness in people with respiratory disease as well as rise in the number of deaths from cardiovascular and respiratory disease among older people. There are also reports of low birth weight babies and other disease like cataract etc. amongst exposed individuals.

ICMR in collaboration with PHFI & IHME conducted the study titled "The impact of air pollution on deaths, disease burden, and life expectancy across the states of India: the Global Burden of Disease Study 2017" published in The Lancet Planetary health 2018 on 6th December 2018 (www.thelancet.com/planetary-health). Accordingly to article 1.24 million (1.09-1.39) deaths in India in 2017, which were 12.5% of the total deaths, were attributable to air pollution, including 0.67 million (0.55-0.79) from ambient particulate matter pollution and 0.48 million (0.39 - 0.58)from household air pollution (the report can be access http://dx.doi.org/10.1016/S2542-5196(18)30261-4).

(b) & (c): While air pollution is known tobe one of the aggravating factors for many respiratory ailments, specific information on the number of people affected by diseases caused or related to air pollution is not available.

There are some studies which are reported and published regarding on the subject matter, for example, in the Lancet, there is a study reported on the "Health and economic impacts of air pollution in the states of India: the Global Burden of Disease Study 2019". It suggests that in 2019, about 1.67 million (1.42-1.92) deaths in India were attributable to air pollution accounting for 17.8% (15.8-19.5) of the total deaths in India. Out of this, 0.98 million (0.77-1.19) deaths were attributable to ambient particulate matter pollution while about 0.61 million (0.39-0.86) to household air pollution, and 0.17 million (0.08-0.26) to ambient ozone pollution. The study report is available at the website –

https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30298-9/fulltext

Another article published in the Lancet Planetary Health in Dec 2018 is on "The impact of air pollution on deaths, disease burden, and life expectancy across the states of India: the Global Burden of Disease Study 2017". The study reported that for the year 2017 for India - deaths attributed to total air pollution as 1.24 million (1.09–1.39), of which 0.67 million deaths attributed to ambient air pollution and another 0.48 million deaths were attributed to household air pollution. This Lancet article mentions about the state wise estimations on deaths and Disability-Adjusted Life Year (DALY - a measure of premature mortality) attributable to air pollution, ambient particulate matter pollution and household air pollution in each state of India for 2017. The study report is available at the website —

https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(18)30261-4/fulltext

(d): Delhi and cities in Indo Gangetic plains face the problem of poor air quality particularly during winter months due to local regional emissions coupled with its unique geography and adverse meteorological conditions.