

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**RAJYA SABHA**  
**UNSTARRED QUESTION No. 1816**  
TO BE ANSWERED ON 16.03.2023

**Data on emission from household cooking**

1816. MS.DOLASEN:  
DR. AMAR PATNAIK:  
SHRI MOHAMMED NADIMULHAQUE:

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

- (a) whether Government has any study/statistics on the drop in household emission levels due to the increase in consumption of LPG under Pradhan Mantri Ujjwala Yojana (PMUY);
- (b) if so, the details thereof and if not, the reasons therefor; and
- (c) whether Government uses any specific data set for the emission analysis regarding the level of emissions arising from household cooking and if so, the details thereof and if not, the reasons therefor?

**ANSWER**

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

(a) to (c)  
Indian Petroleum & Natural Gas statistics of 2020-21 of Ministry of Petroleum and Natural Gas states that more than 95 million new connections of domestic LPG were distributed in India under Pradhan Mantri Ujjwala Yojana (PMUY). As per National Statistical Office (NSO) survey report, 2018, 60 % households use LPG and rest still rely on solid fuels.

Following data sets / factors are used for emission analysis for domestic sectors:

A household of five persons may use about 10 LPG cylinders per year and non-LPG users consume on average 90 kg of solid fuel per month. (MoPNG 2016) and PM2.5 emissions in case of LPG & solid fuel are 0.4 g/kg and 3-5.7 g/kg respectively. (Source: Indian emission factors developed by ARAI-Pune, TERI 2016, GAINS 2016).

Based on Emission Inventory of States of Indo-Gangetic Plains (Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal, Chandigarh & Delhi), the net emission of the PM2.5 from the domestic sector was found to be 437 Gg/Year for the base year of 2018, which contributes nearly 19 % of the total emission over the Indo-Gangetic Plains.

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