

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**STARRED QUESTION NO. 83**  
TO BE ANSWERED ON 08.02.2019

**Maintenance of Livestock**

\*83. SHRI PARVESH SAHIB SINGH:

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

- (a) whether maintenance of livestock has a huge carbon imprint on the environment and if so, the details thereof;
- (b) whether the Government has any figures/data regarding the amount of green house gases generated annually by the meat industry in India and if so, the details thereof; and
- (c) whether the Government has taken any steps to check and control the negative impacts that the meat industry has on climate change in the country and if so, the details thereof?

**ANSWER**

**MINISTER FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(DR. HARSH VARDHAN)**

A Statement is laid on the Table of the House.

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**Statement referred to in reply to Lok Sabha Starred Question No. 83 by Shri Parvesh Sahib Singh regarding 'Maintenance of Livestock'**

(a) and (b) The Greenhouse Gases (GHG) namely, methane and nitrous oxide are emitted by livestock through enteric fermentation and manure (animal wastes) management. As per the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) published in 2013, ruminant livestock such as cattle, sheep, goats, etc globally produce between 87 and 94 million tonnes of methane per year by food fermentation in their anoxic rumens. According to India's Second Biennial Update Report (BUR-2) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2018, GHG emissions in 2014 by livestock in the form of enteric fermentation and manure management was 255.26 million tonnes of carbon dioxide equivalent which is about 9.79% of the total GHG emissions of the country.

The National GHG Inventory is prepared on the basis of IPCC guidelines and periodically submitted to UNFCCC. The GHG Inventory for meat industry is included in the emissions from the livestock under the agriculture emissions. In addition marginal methane emissions are also contributed by wastewater generated by poultry and meat industry.

(c) According to the document '*Samanvay*' published by this Ministry in 2017, significant proportion of India's population is vegetarian. Meat consumption in India is only 12 grams per person per day against the global average of 115 grams per person per day. However, Government has initiated various schemes and programmes for reduction of GHG emissions from livestock. Several feeding modules have been developed for reducing methane emissions from rearing of sheep and goat. Ration Balancing Programme contributes to improving animal productivity as well in reducing both the cost of production and the emission of greenhouse gases per unit of animal product. Feeding bypass proteins is another programme that optimizes use of protein supplements within the ruminant system.

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