

GOVERNMENT OF INDIA  
 MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING  
 DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING  
 LOK SABHA  
 UNSTARRED QUESTION NO. 242  
 TO BE ANSWERED ON 2<sup>ND</sup> DECEMBER 2025

**DUNG OF DAIRY ANIMALS**

242. **DR. BHOLA SINGH:**

Will the Minister of FISHERIES, ANIMAL HUSBANDRY AND DAIRYING

मत्स्यपालन, पशुपालन और डेयरी मंत्री

be pleased to state:

- (a) whether the Government is aware that milk is considered a key resource for dairy farmers and given policy priority whereas dung, which has immense potential for energy, fertilizer and income generation, often does not given adequate attention;
- (b) whether the Government has made any assessment of the potential of dung-based bio-gas to meet the domestic fuel needs of rural households and the country's transportation fuel demand;
- (c) whether the Government has made any evaluation of the potential for widespread use of dung to enhance soil fertility and reduce dependence on chemical fertilizers; and
- (d) if so, the major initiatives taken and schemes being implemented by the Government to promote manure management, bio-gas production, composting and dung-based value addition for the benefit of small and marginal dairy farmers?

ANSWER

THE MINISTER FOR FISHERIES, ANIMAL HUSBANDRY AND DAIRYING  
 (SHRI RAJIV RANJAN SINGH ALIAS LALAN SINGH)

(a) to (d) Dung-based biogas has great potential for clean energy production in rural areas. Several studies and field-based assessments have established that the application of Dung based biogas slurry and slurry-based fertilizers enhances soil organic carbon, improves soil structure, increases microbial activity and improves water retention capacity. National Dairy Development Board (NDDB), had the studies conducted through Anand Agricultural University/Banaras Hindu University which demonstrated that the use of slurry-based value-added organic fertilizers can lead to a reduction of chemical fertilizer usage by up to 25%, while also resulting in improved crop yields. National Dairy Development Board (NDDB), under the guidance of DAHD, is implementing manure management projects nationwide through dairy cooperatives. These initiatives promote sustainable waste utilization, energy generation, and nutrient recycling. NDDB has developed integrated Manure Value Chain Models at both household and commercial scales, such as:

- I. Zakariyapura Model – Decentralised household-level biogas units.
- II. Varanasi Model – Centralized large-scale biogas plant for captive use in dairy plants.
- III. Banas Model – Centralized Compressed Biogas (CBG) plant converting dung-based biogas into CBG.

These models emphasize end-to-end manure value chains, providing additional income to small and marginal dairy farmers while converting bio-slurry into organic manure to enhance soil fertility and reduce dependence on chemical fertilizers. To institutionalize and scale these efforts, 35,000 decentralized biogas plants (2 m<sup>3</sup> each) have been installed in smallholder backyards, generating clean cooking energy, organic fertilizer, and mitigating about 7 tonnes CO<sub>2</sub>e per plant per year. In addition, large centralized biogas plants (2,000–4,000 m<sup>3</sup>) at district

milk unions such as Banaskantha and Varanasi produce CBG/biogas for mobility and dairy energy needs, mitigating 2,400–3,000 tonnes CO<sub>2</sub>e per plant per year. Replication is underway with additional plants in Banaskantha, and the models are being extended to Amul, Sabar, Dudhsagar (Gujarat), and Barauni (Bihar), to further scale these efforts, NDDDB has signed 25 MoUs with dairy cooperatives across 15 states, supported by partnerships with Suzuki R&D, NABARD, Sustain Plus Energy Foundation, and NDDDB Mrida Ltd. for nationwide expansion of sustainable manure management and dung-based value addition.

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