## GOVERNMENT OF INDIA MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING LOK SABHA

UNSTARRED QUESTION NO. 3580 TO BE ANSWERED ON  $17^{TH}$  DECEMBER, 2024

## **NON-BOVINE MILK**

3580. SHRI S JAGATHRATCHAKAN: SMT. SANJNA JATAV:

Will the Minister of FISHERIES, ANIMAL HUSBANDRY AND DAIRYING मत्स्यपालन, पशुपालन और डेयरी मंत्री

be pleased to state:

- (a) whether non-bovine milk could be the future due to its therapeutic, medicinal properties insulin and low-lactose properties with cheap farming compared to cattle, milk could be the future in country; and
- (b) the details of the initiatives that proposed to be taken by the Government to explore the numerous therapeutic properties of the milk of non-bovine species, such as goats, sheep, camels, donkeys, yaks, etc.?

## **ANSWER**

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

- (a) Non-bovine milk holds a huge potential due to its nutritional and therapeutic properties. In developed countries, most of the milk is produced from cows. India has varied animal resources which are producing milk. The milk produced from sheep, goat, camel and donkey has claimed to have nutritional values and health benefits. Hence, India can play a critical role in the global market for non-bovine milk. Food regulatory body of country, Food Safety and Standards Authority of India (FSSAI) has also laid standards for goat, sheep and camel milk apart from cow and buffalo milk.
- (b) The Department of Animal Husbandry & Dairying, Government of India (DAHD, GoI) is implementing a Scheme National Livestock Mission. Under this schemes, the DAHD, GoI is implementing Entrepreneurship Development Programme (EDP) for sheep, goat, camel and donkey for which up to ₹ 50 lakh is provided as subsidy to the individuals, Farmers Producers Organizations (FPO), Farmer Cooperative Organizations(FCO), Self Help Groups(SHG), Joint Liability Group(JLG) and Section 8 companies. Under the NLM Scheme, breed upgradation programme for these species is also undertaken. The Scheme incentivizes research activities and innovations for the advancement of sheep, Goat, donkey, camel and other non-bovine livestock and livestock products.

To bring focus in this area, and to explore further opportunities, the Department of Animal Husbandry & Dairying, Government of India, in collaboration with Indian Council of Agricultural

Research- Central Institute for Research on Goats (ICAR-CIRG) has organized National Goat Fair and Exhibition at ICAR-CIRG, Makhdoom, Mathura and a stakeholder meeting with the States, ICAR Institutes, Non-Government Organizations at Agra in November, 2024 to promote Goat sector and Goat Milk. Indian Council of Agricultural Research- Central Institute for research on Goats (ICAR-CIRG) has conducted some work on compositional values of the Goat milk. The nutritional profiling of goat milk, especially fatty acid, amino acid and mineral profiles have been evaluated and attempts have been made to further enhance the amount nutritionally and bioactive components in goat milk.

The DAHD, GoI, in collaboration with the Food and Agriculture Organization, India (FAO, India) and Indian Council of Agricultural Research-National Research Centre on Camel (ICAR-NRCC) is organizing a stakeholder meeting at Bikaner, Rajasthan in December, 2024 on Camel sector including camel milk. Further, a stakeholder meeting has been proposed at Indian Council of Agricultural Research-Central Sheep and Wool Research Institute, Avikanagar in February, 2025 on Sheep development.

Indian Council of Agricultural Research- National Research Centre on Camel (ICAR- NRCC) is conducting studies to validate therapeutic values of camel milk, Characterization of Biomolecules from Milk of Non-Bovine Species, Evaluation of therapeutic potential of camel milk/milk-products as an adjunct therapy in chronic pulmonary tuberculosis, Evaluation of clinical significance of supplementation of pasteurized camel milk as an adjunct therapy in human patients suffering from Dengue fever, Evaluation of the effect of fermented camel milk in gastric ulcer management.

Indian Council of Agricultural Research-National Research Centre on Equines (ICAR-NRCE) has initiated a project entitled "Establishing a model precision donkey farming and exploration of therapeutic and cosmetic values of donkey milk to enhance farmers' income" and "Integrated analysis for the ultra-deep compositional characteristics of donkey colostrum and mature milk".

Indian Council of Agricultural Research- National Research Centre on Yak (ICAR-NRC on Yak) has taken up the projects and schemes for the assessment of the therapeutic potential of the milk of Yak in collaboration with IIT Roorkee.

Indian Council of Agricultural Research- Central Sheep and Wool Research Institute (ICAR-CSWRI) has initiated steps for the Genetic improvement and propagation of Patanwadi sheep as dairy sheep. To boost the production of sheep milk, ICAR-CSWRI established Patanwadi sheep flock at institute and conducting research for genetic improvement of Patanwadi sheep as dairy sheep through selective breeding.

All research being done as above will help in establishing value chains for marketing of such non-bovine milk.