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GOVERNMENT OF INDIA MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING LOK SABHA UNSTARRED QUESTION No. 2893 TO BE ANSWERED ON 18th March 2025

BOVINE BREED

2893. SHRI NARAYAN TATU RANE:

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

be pleased to state:

(a) the efforts made by the Government to increase milk production in the country;

(b) whether assistance of artificial insemination and other techniques has been taken to increase the milk production of Indian breed of 'Girgay' by Brazil Government, if so, the details thereof; and

(c) whether as the line of this model the said technique has been replicated to the Bovine breed and if so, the details thereof?

ANSWER

THE HON'BLE MINISTER OF STATE FOR FISHERIES, ANIMAL HUSBANDRY AND DAIRYING (PROF. S. P. SINGH BAGHEL)

(a) & (c) To complement and supplement the efforts of States and Union Territories in increasing milk production, the Government of India is implementing the Rashtriya Gokul Mission. This initiative focuses on the development and conservation of indigenous bovine breeds, genetic upgradation of the bovine population, and enhancing milk production and productivity.

Under the Rashtriya Gokul Mission, the Government of India is implementing the following techniques for the genetic upgradation of indigenous bovine breeds to enhance milk production:

(i) **Nationwide Artificial Insemination Programme**: The programme aims to enhance AI coverage and deliver quality Artificial Insemination (AI) services at farmers' doorsteps using semen from high-genetic-merit bulls, including indigenous bovine breeds.

Accelerated Breed Improvement Programme using Sex-Sorted Semen: This program aims to produce female calves with up to 90% accuracy, thereby enhancing breed improvement and increasing farmers' income. The use of sex-sorted semen of indigenous breeds is being actively promoted under this programme.

Launch of Indigenously Developed Sex-Sorted Semen Production Technology:

For the first time in India, facilities established under the Rashtriya Gokul Mission have successfully produced sex-sorted semen of indigenous cattle breeds. These facilities have been set up at five government semen stations in Gujarat, Madhya Pradesh, Tamil Nadu, Uttarakhand, and Uttar Pradesh. Additionally, three private semen stations are also contributing to the production of sex-sorted semen doses. The launch of indigenously developed sex-sorted semen production technology has significantly reduced the cost of sex-sorted semen from ₹800 to ₹250 per dose. This breakthrough makes sex-sorted semen more affordable for farmers and boosts the indigenous female cattle population. So far, 1.17 crore sex-sorted semen doses have been produced using high-genetic-merit bulls, including those of indigenous breeds.

Accelerated Breed Improvement Programme using IVF Technology: For the first time in India, bovine IVF technology has been promoted for the development and conservation of indigenous breeds. The Department has established 22 IVF laboratories to support the promotion of indigenous breeds across the country. An incentive of ₹5,000 per assured pregnancy is provided to farmers under this program to encourage the development of indigenous breeds.

Launch of Indigenous Culture Media: An indigenous media for in-vitro fertilization (IVF) has been launched to further promote IVF technology in the country. This indigenous culture media provides a cost-effective alternative to expensive imported media, making IVF technology more accessible.

Multi-purpose Artificial Insemination Technicians in Rural India (MAITRI): MAITRIS are trained and equipped to deliver quality artificial insemination services at farmers' doorsteps. Additionally, assistance is provided to States and Union Territories for refresher training of artificial insemination technicians and professionals.

(ii) **Strengthening of semen stations**: Under the Rashtriya Gokul Mission, the strengthening of semen stations has raised the number of high-genetic-merit bulls to 1,845 (2023-24), producing 29 million doses of indigenous breed semen. Artificial insemination with indigenous breed semen is encouraged across the country.

(iii) **Progeny testing and Pedigree selection programme**: This programme aims to produce high genetic merit bulls, including bulls of indigenous breeds. Progeny testing is implemented for Gir, Sahiwal breeds of cattle, and Murrah, Mehsana breeds of buffaloes. Under the Pedigree selection programme Rathi, Tharparkar, Hariana, Kankrej breeds of cattle and Jaffarabadi, Nili Ravi, Pandharpuri and Banni breeds of buffalo are covered. Disease free high genetic merit bulls of indigenous breeds produced under the programme is made available to semen stations across the country.

(iv) Launch of Indigenously Developed Genomic Chip: For the first time, a genomic chip has been developed and launched under the Rashtriya Gokul Mission for indigenous breeds. This common genomic chip is significantly contributing to the development and conservation of indigenous bovine breeds.

(b) The traditional and advanced breeding technologies including Artificial Insemination, IVF technology, sex sorted semen, genomic selection etc are used in Brazil to enhance milk production of breeds of Indian origin including Gir breed of cattle.
