

Sex Sorted Semen Facility at Purnea

Why in News?

Prime Minister Shri Narendra Modi inaugurated a **state-of-the-art Sex Sorted Semen facility** at the Semen Station in **Purnea, Bihar.**

Key Points

- About: The Sex Sorted Semen facility, developed under the <u>Rashtriya Gokul Mission</u> with central assistance of ₹10 crore, aims to transform the <u>dairy sector</u> with a production capacity of 5 lakh doses per year.
- Indigenous Technology: The Gausort technology, launched by the Prime Minister on 5th October 2024, is a critical component of this facility.
 - It enables the sorting of semen to produce female calves with 90% accuracy, which is pivotal in reducing economic burdens on dairy farmers.

Significance:

- The facility ensures that Sex Sorted Semen is available at reasonable rates to farmers, especially in the Eastern and North-Eastern regions, aligning with the 'Make in India' and 'Atmanirbhar Bharat' initiatives.
- The technology boosts the production of female calves, crucial for dairy farming, offering direct economic benefits to farmers, particularly small, marginal, and landless laborers involved in dairying.

Purnea Semen Station:

- Established with a Central assistance of Rs. 84.27 crores, the Purnea station is one of the largest government-owned semen stations in India and the first of its kind for the Eastern and North-Eastern states.
- The station is currently producing **50 lakh doses per annum**, significantly contributing to the growth of the dairy industry in the region.

Rashtriya Gokul Mission

- About: The RGM, launched in 2014 by the Ministry of Fisheries, Animal Husbandry, and Dairying, aims to develop and conserve indigenous bovine breeds and is implemented by the Department of Animal Husbandry and Dairying.
 - The mission continues as part of the Rashtriya Pashudhan Vikas Yojna for the period **2021 to 2026** with a budget outlay of Rs. 2400 crore.
- Need: The decline of indigenous bovine breeds, like Punganur(Andhra Pradesh), threatens valuable genetic resources. These breeds are climate-resilient, produce high-quality milk, and adapt well to local environments, highlighting the need for preservation efforts.
- **Objectives:** RGM aims to boost bovine productivity, promote high-quality breeding, and strengthen **Artificial Insemination (AI)** services.
 - Al is a **reproductive technology** that involves manually introducing sperm into a female's reproductive tract to achieve pregnancy.

Components of RGM:

 High Genetic Merit: Enhances genetic merit through bull production via progeny testing, Pedigree Selection, genomic selection, and germplasm import.

- It strengthens **semen stations**, implements **in vitro fertilization (IVF) technology for assured pregnancies**, and sets up breed multiplication farms to scale genetic improvement in livestock.
- Artificial Insemination Network: Promotes establishment of Multi-Purpose Artificial Insemination Technicians in Rural India (MAITRIs) to expand nationwide Al access.
 - RGM implements the **National Digital Livestock Mission** to improve data management and service delivery.
- **Conservation of Indigenous Breeds**: Support for **Gaushalas** for the care and preservation of indigenous cattle.
- Skill Development and Awareness: Focuses on skill development through capacity-building programs, raising farmer awareness, and supporting research and innovation in bovine breeding.
- **Funding Pattern:** The components of the RGM are largely funded by a **100% grant-in-aid basis**, with some specific components involving partial subsidies (e.g., IVF pregnancies, sex sorted semen, breed multiplication farms).

PDF Refernece URL: https://www.drishtiias.com/printpdf/sex-sorted-semen-facility-at-purnea