

GOVERNMENT OF INDIA  
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING  
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING  
LOK SABHA  
UNSTARRED QUESTION No. 1722  
TO BE ANSWERED ON 2<sup>ND</sup> JULY 2019

**ICAR-NDRI RESEARCH ON CATTLE**

1722. SHRIMATI RAKSHA NIKHIL KHADSE:

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

be pleased to state:

- a) whether the Government proposes through ICAR-NDRI to extend the research programme titled 'Semen Sexing in Cattle';
- b) if so, the details thereof;
- c) whether the institute has been able to find out a solution through its research in the area of semen sexing which could help in producing significantly more number of female calves to cope with the increasing demand of milk;
- d) if so, the details thereof; and
- e) the efforts taken by the Government in this direction?

**ANSWER**

**THE MINISTER OF STATE FOR FISHERIES, ANIMAL HUSBANDRY AND DAIRYING  
(SHRI SANJEEV BALYAN)**

(a) & (b) As per information received from ICAR, the project on "Semen Sexing in Cattle" at ICAR-National Dairy Research Institute (NDRI), Karnal sanctioned for the period of three years (2015-2017) has been extended upto 2020.

(c) to (e) Under the project on "Semen Sexing in Cattle", the following technologies have been standardized by ICAR:

- 1) Selection of high fertile bulls with more than 50% conception rate at an early age through technologies like Fine Needle Aspiration Cytology (FNAC) of testicular tissue, use of Ultrasonography and Infrared Thermography
- 2) Reduction of sperm dose (from 20 million to 5 million) per straw (0.25 ml) without compromising fertility (more than 40% conception rate) in indigenous and crossbred cattle and Murrah buffaloes.

In addition, a project entitled “Targeted immobilisation of Y-bearing spermatozoa and modulation of oviduct milieu for skewing sex ratio towards female offspring in dairy cattle” has also been sanctioned by ICAR for funding through National Agriculture Science Fund (NASF) to Southern Research Station, ICAR-NDRI at Bengaluru for a period of three years (2018-2021).

Department of Animal Husbandry and Dairying is also assisting States for establishment of semen sexing facility at semen stations under Rashtriya Gokul Mission. Under the scheme 11 projects of States have been sanctioned on the basis of available technology which is of foreign origin as Indian technology for semen sexing in cattle is not yet available.