

GOVERNMENT OF INDIA
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING
LOK SABHA
UNSTARRED QUESTION No. 1867
TO BE ANSWERED ON 3RD MARCH 2020

ARTIFICIAL INSEMINATION

1867. SHRI RANJEETSINGH HINDURAO NAIK NIMBALKAR:

Will the Minister of FISHERIES, ANIMAL HUSBANDRY AND DAIRYING

मत्स्यपालन, पशुपालन और डेयरी मंत्री

be pleased to state:

- (a) whether the Government has been working to develop an indigenous technology for artificial insemination through sex sorted semen to tackle stray cattle menace;
- (b) if so, the details thereof; and
- (c) the fresh steps taken by the Government to conserve indigenous breeds of cattle as well?

ANSWER

THE MINISTER OF STATE FOR FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
(DR. SANJEEV KUMAR BALYAN)

(a) & (b) Indian Council of Agricultural Research informed that ICAR-National Dairy Research Institute (NDRI), Karnal (Haryana) and Anand Agricultural University, Anand (Gujarat) are undertaking research on basic and applied aspects for developing an alternate method of sexing of cattle semen under a project entitled “Incentivising research in agriculture for developing an alternative method for sexing of semen as the technology” since 2015.

(c) In order to complement and supplement the efforts made by the States for development and conservation of indigenous breeds Government of India has taken following steps to supplement the efforts of States:

I) Conservation of Indigenous Bovine Breeds

i) Gokul Gram: 21 Integrated indigenous cattle development Centres – “Gokul Grams”- are being established under the Rashtriya Gokul Mission with the aim of conservation and development of indigenous bovine breeds in a scientific and holistic manner.

ii) National Kamdhenu Breeding Centre: Two National Kamdhenu Breeding Centre (NKBC) as repository of indigenous germplasm of all indigenous breeds and supply certified germplasm to the farmers undertaking rearing of indigenous breeds and increasing their stock are under establishment. Establishment of National Kamdhenu Breeding Centre in Andhra Pradesh at

Chintaladevi located in Nellore District has been completed and work is under progress for Northern Region NKBC in Madhya Pradesh.

iii) Pashu Sanjivni: Animals in milk are being identified under the Pashu Sanjivni using poly urethane tags with 12 digit unique identification number and their data is being uploaded on INAPH database. As on date 27.02.2020, 2.95 crore animals tagged and their data have been uploaded on INAPH data base.

II) Breed Improvement by Modern Reproductive Techniques

i) Establishment/strengthening of Embryo Transfer and In-Vitro Fertilization centres: Projects for strengthening/ establishment of 30 ETT/IVF labs have been sanctioned for propagation of elite animals of indigenous breeds and to meet demand of bulls of indigenous breeds. Centre of Excellence for Indigenous Breeds (CoEIB) at 3 locations are under establishment for providing training in Embryo Transfer Technology, In Vitro Fertilization Technique, Sex Sorted Semen production, Genomics and retraining of skilled manpower in latest developments in breeding technologies.

ii) National Bovine Genomic Centre for Indigenous Breeds (NBGC-IB): Funds have been released to National Bureau of Animal Genetics Resources and National Dairy Development Board for development of genomic chip. A custom made genotyping chip (INDUSCHIP) which is suitable to genotype Indian cattle breeds and their crosses has been developed by National Dairy Development Board (NDDDB) and till date 15,574 animals have been genotyped in order to create referral population. NDDDB has developed buffchip for genomic selection of buffaloes and till date 4,320 buffaloes have been genotyped.

iii) Establishment of Facility for Sex Sorted Semen Production: Projects from 12 semen stations Gujarat, Haryana, Kerala, Karnataka, Madhya Pradesh, Maharashtra Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, Punjab and Himachal Pradesh have been sanctioned and Central Share has been released to 11 stations. The use sex sorted semen will not only enhance milk production but also crucial in limiting population of male cattle/ stray cattle.

III) Genetic upgradation through traditional techniques:

i) Progeny Testing: Milk production is a sex limited trait therefore genetic potential of the bull is estimated by the performance of the daughters. The scientific breeding method for estimating predicted transmitting ability of bulls on daughters' performance is termed as progeny testing. 14 Organised Progeny Testing Programmes (PTP) initiated under NDP-I have been subsumed under Rashtriya Gokul Mission since March 2019. During 2019-20 (upto December 2019), 291 progeny tested bulls produced under the programme

ii) Pedigree selection: Under the programme, male calves are selected on the basis of pedigree details and performance of dam, sire and other ancestors in the pedigree. The pedigree selection programmes initiated under NDP-I have been subsumed under RGM since March 2019. During 2019-20 (upto December 2019), 39 High Genetic Merit bulls produced under the programme.

IV) Extension of Artificial Insemination Coverage:

i) Nationwide Artificial Insemination (AI) programme: Nationwide Artificial Insemination programme has been launched on 11th September 2019 for implementation in 605 districts with less than 50% Artificial Insemination coverage covering 300 villages per district and 20,000 animals per district. The programme is extended to all the districts of North eastern States and Union Territory Jammu and Kashmir. Under the programme 33.27 lakh animals covered and 16.77 lakh farmers got benefitted as on date 27.02.2020.

ii) Krishi Kalyan Abhiyan: Artificial Insemination Coverage (AI) with High Yielding Indigenous Breeds in the 112 aspirational districts identified by Niti Aayog has been implemented during 2018-19. Under the programme 9.05 lakh animals covered using semen of High genetic merit bulls of indigenous breeds.

V) Awareness Program:

i) National Gopal Ratna and Kamdhenu Awards: In order to create awareness and reward for farmers and Institutions who are engaged in scientific management of recognized Indigenous cattle breeds, National Gopal Ratna and National Kamdhenu Award have been instituted under Rashtriya Gokul Mission.

ii) E Pashu Haat Portal: E Pashu Haat portal has been developed for connecting breeders and farmers regarding availability of quality bovine germplasm of indigenous breeds. Information of 11.54 crores semen doses; 363 embryos and 18.13 lakh live animals are available on the portal as on date 27.2.2020.