

GOVERNMENT OF INDIA
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING
LOKSABHA
UNSTARRED QUESTION NO. 3754
TO BE ANSWERED ON 21ST DECEMBER 2021

CONSERVATION OF INDIGENOUS BREEDS OF CATTLES

3754. SHRI PRAJWAL REVANNA:

Will the Minister of FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
मत्स्यपालन, पशुपालन और डेयरी मंत्री
be pleased to state:

- (a) the steps taken by Government to conserve indigenous breeds of cattles particularly Hallikar, Amrithmahal ,Khillari etc. which are native to the State of Karnataka;
- (b) whether the Government has conducted census of such breeds of cattle, if so, whether the numbers are declining or increasing during the recent years;
- (c) whether Indian Council of Agricultural Research in association with Animal Husbandry and Veterniary Department of Karnataka has undertaken any measures to protect such breeds, if so, the details thereof along with the funds sanctioned and utilised so far; and
- (d) the status of implementation of Rashtriya Gokul Mission in the State of Karnataka?

ANSWER

**THE MINISTER OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
(SHRI PARSHOTTAM RUPALA)**

(a) Government of India has been implementing Rashtriya Gokul Mission with focus on development and conservation of indigenous bovine breeds, genetic up gradation of bovine population and enhancement of milk production and productivity of bovines. All cattle and buffalo breeds including Hallikar, Amrithmahal ,Khillari of Karnataka have been covered under the scheme. Following measures have been undertaken under the scheme for development and conservation of indigenous bovine breeds

(i) Implementation of Nationwide Artificial Insemination Programme using semen of high merit bulls including semen of high genetic merit bulls of indigenous breeds. Under the component till date 2.37 crore animals have been covered, 2.87 crore artificial inseminations have been performed and 1.5 crore farmers benefited.

(ii) Implementation of progeny testing and pedigree selection for production of high genetic merit bulls including bulls of indigenous breeds like Gir, Sahiwal, Tharparkar, Kankrej, Hariana, Rathi breeds of cattle and Murrah, Mehsana, Jaffarabadi, Pandharpuri, Nili Ravi breeds of buffalo. So far 2332 high genetic merit bulls of indigenous breeds have been produced and made available to semen stations for semen production.

(iii) Implementation of IVF for faster genetic upgradation of bovine population including indigenous breeds of cattle and buffaloes. Under the component projects have been sanctioned for establishment of 30 IVF laboratories out of this 17 laboratories have been made operational and work is in progress at 13 IVF labs. As on date 12438 viable embryos of indigenous breeds have been produced, 5864 embryos transferred, 951 calves born and 5976 embryos are under storage.

(iv) For implementation of genomic selection DNA chip has been developed for identification of high genetic merit bulls of indigenous bovine breeds at young age against 6- 7 years taken in traditional method to prove genetic merit of the bulls National Dairy Development Board has developed Indus chip and buff chip for genomic selection of cattle and buffaloes including animals of indigenous breeds. ICAR -National Bureau of Animal Genetic Resources has developed Low Density DNA chip exclusively for genomic selection of animals of indigenous breeds.

(v) Sex sorted semen production for indigenous breeds of cattle along with other bovine breeds has been initiated in the country. Sex sorted semen is important for production of female calves with 90% accuracy. As on date around 10 lakh sex sorted semen doses have been produced at Government semen stations and 18 lakh semen doses produced at semen stations with Mehsana Milk Union, BAIF and ABS Chitale.

(vi) Funds have been released to the States for establishment of 16 Gokul Grams for development and conservation of indigenous breeds of cattle and buffaloes in scientific and holistic manner out of which 14 Gokul Grams have been made functional and work is in progress at remaining 2 Gokul Grams. Two National Kamdhenu Breeding Centres have been established as repository of germplasm of indigenous breeds.

Karnataka has been participating under Rashtriya Gokul Mission and an amount of Rs 51.35 crore has been released since inception of the scheme. Following specific efforts have been made under Rashtriya Gokul Mission in Karnataka for development and conservation of Hallikar, Amritmahal, Khillari breed of cattle:

(i) Funds have been released to the State for establishment of Gokul Gram at Lingadahalli, Chikkamagalur district for scientific and holistic development of Amrithmahal breed of cattle, total of one thousand cows are being inducted and work is under progress.

(ii) Funds have been released to the State for implementation of Nationwide Artificial Insemination Programme. Under the programme semen of elite bulls of all indigenous breeds (Hallikar, Amrithmahal, Malnad Gidda, Khillar, Krishna Valley, Deoni, Gir, Sahiwal, Tharparkar etc.) has been used for genetic upgradation of all indigenous breeds including Hallikar, Amrithmahal and Khillar breed of cattle.

(iii) Funds have been released to the for induction of Artificial Insemination (AI) technicians (MAITRIs) and strengthening existing AI network for extending AI coverage including AI coverage among indigenous breeds with elite bulls of indigenous breeds.

(iv) Conservation and revitalization of indigenous cattle breeds (Amrithmahal, Hallikar and Malnad Gidda) is also being taken up under Ministry of Environment, Forest and Climate changes (MoEFCC) funded- National Adaptation fund for climate change (NAFCC) project- “Conservation and management of indigenous varieties of livestock (cattle and sheep) in the wake of climate changes in Karnataka”.

(v) As per the information received from the State Government of Karnataka following steps are being undertaken for development and conservation of indigenous bovine breeds including Hallikar, Amrithmahal and Khillari breed of cattle: (a) Amrithasiri Scheme under which female calves, heifers and cow of all indigenous breeds maintained at State government farms, are distributed to farmers of native breeding tracts of respective breeds, at 25% of the book value for conservation and propagation; (b) Amrithadhara Scheme under which male calves and bulls of all indigenous breeds of Karnataka maintained at State government farms, are distributed to farmers of native breeding tracts of respective breeds as well as the farmers from taluks who had participated in open auction for the last 5 years, at the market value, for breeding and draught purpose.

(b) The population of indigenous breeds namely Amrithmahal, Hallikar, and Khillari have shown declining trend between breed survey 2012 and 20th Livestock Census 2019. However, productivity of indigenous cattle has increased by 13.6% (from 2.49 kg per animal per day to 2.83kg per animal per day) between 2015-16 and 2019-20 (As per Basic Animal Statistics 2017 and 2020)

(c) As per the information received from Government of Karnataka Indian Council of Agricultural Research (ICAR) in association with Animal Husbandry and Veterinary Department of Karnataka has been undertaking following measures

(i) ICAR-National Dairy Research Institute Southern Regional Station (NDRI-SRS), Bangalore has been associated with Karnataka Livestock Development Agency in the project “Conservation and management of indigenous varieties of livestock (Cattle and Sheep) in the wake of climate change in Karnataka”. Genomic Studies of Hallikar / Malnad Gidda / Amrithmahal and Field Performance Recording of Malnad Gidda Breed of cattle are being taken up by NDRI-SRS, Bangalore. Under the project amount of Rs 350.00 lakhs have been sanctioned out of which Rs. 325.00 lakh has been released for the purpose and till date an amount of Rs. 298.12 lakhs have been utilized.

(ii) ICAR National Bureau of Animal Genetic Resources (NBAGR) has been carrying out the work on the characterization of indigenous population of livestock and poultry and subsequently proceeds for their registration as defined breeds. Besides this, ICAR-NBAGR has preserved semen doses of above-mentioned breeds at National Gene Bank and also carried out in-situ conservation of Krishna Valley breed of cattle under ICAR-Network Project on Animal Genetic Resources (AnGR)

(d) The status of implementation of Rashtriya Gokul Mission in the State of Karnataka is as under:

(i) Nationwide Artificial Insemination Programme has been implemented in 17 districts of Karnataka and under the programme quality artificial insemination services has been made available free of cost at farmers doorstep. Under the programme so far 10.56 lakh animal covered, 139.91 lakh artificial inseminations performed and 8.65 lakh farmers benefitted.

(ii) As per progress report State has installed 12 liquid nitrogen storage silos at strategic location to streamline liquid nitrogen and transport and distribution system, trained 1329 MAITRIs out of this 550 are inducted, strengthened 3 semen stations, trained 1594 existing AI technicians and 784 professionals. State yet to complete establishment of Gokul Gram at Lingadahalli and initiate implementation of pilot project on marketing of A2A2 milk
