

**GOVERNMENT OF INDIA
AGRICULTURE AND FARMERS WELFARE
LOK SABHA**

UNSTARRED QUESTION NO:3489
ANSWERED ON:08.08.2017
Research for Increase in Milk Production
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Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether the milk productivity of Indian cows has reduced due to climate change;
- (b) if so, the steps proposed to be taken by the Government to improve the milk production of Indian cows;
- (c) whether the National Dairy Research and Development Board has sought further assistance to conduct research and development in this regard; and
- (d) if so, the steps proposed to be taken by the Government in this regard?

Answer

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

(SHRI SUDARSHAN BHAGAT)

(a): As informed by Indian Council of Agricultural Research no study on effect of climate change on milk production in Indian cows has been conducted by ICAR. However, under Chapter 24 of ICAR published book entitled "Global Climate Change and Indian Agriculture – case studies from the ICAR Network Project" the following has been mentioned:

"Increased heat stress associated with global climate change may, however, cause distress to dairy animals and possibly impact milk production. Temperature-Humidity Index was used to relate animal stress with productivity of milk of buffaloes, crossbred and local cows. These studies indicated that India loses 1.8 million tonnes of milk production at present due to climatic stresses in different parts of the country. Global warming will further negatively impact milk production by 1.6 million tonnes by 2020 and more than 15 million tonnes by 2050. High producing crossbred cows and buffaloes will be impacted more than indigenous cattle. Northern India is likely to experience greater impact of global warming on milk production of both cattle and buffaloes in future".

(b): Steps undertaken by the Government to improve milk production of indigenous cows are as under:

i) Rashtriya Gokul Mission has been launched December 2014 for the development and conservation of indigenous bovine breeds thereby enhancing milk production and productivity. The framework of the scheme is to enhance milk production & productivity through induction of high genetic merit bulls for semen production; field performance recording; strengthening of bulls mother farms; setting up of Gokul Grams etc.

ii) National Programme for Bovine Breeding is being implemented for enhancing productivity of milch animals through extension of Artificial Insemination (AI) coverage. This is done through establishment of Multi Purpose AI Technicians in Rural India (MAITRIs); strengthening of existing AI centres; monitoring of AI etc.

iii) National Mission on Bovine Productivity has been launched in November 2016 with the aim of enhancing milk production and productivity and thereby making dairying more remunerative to the farmers. The scheme is being implemented with following components a) Pashu Sanjivni- this component includes identification of animals in milk using UID, issuing health cards to all animals in milk and uploading data on INAPH data base.; b) Advance reproductive Technique- under the component sex sorted semen production facility is being created at 10 A graded semen stations and 50 Embryo Transfer Technology Labs with IVF facilities are being created in the country; c) Creation of E Pashu Haat Portal- The e-pashu haat portal has been launched in November 2016 for linking farmers and breeders of indigenous breeds and d) Establishment of National Bovine Genomic Centre for Indigenous Breeds(NBGC-IB): The NBGC-IB is being established for enhancing milk production and productivity through genomic selection among indigenous breeds.

iv) Two National Kamdhenu Breeding Centres are being established one in the State of Andhra Pradesh for southern region and other in Madhya Pradesh for northern region of the country with the aim of development and conservation of indigenous breeds in a scientific manner and thereby enhancing milk production and productivity.

v) National Dairy Plan-I a world Bank assisted project being implemented in 18 major dairy States with aim of enhancing milk production and productivity in order to meet demand of milk in the country through strengthening of semen stations; bull production programme (progeny testing and pedigree selection), ration balancing programme etc.

vi) Government has also established three subordinate organizations namely (i) Central Cattle Breeding Farms (CCBFs) (ii) Central Herd registration Scheme and (iii) Central Frozen Semen Production & Training Institute. These organizations are also undertaking genetic upgradation of milch animals through supply of disease free high genetic merit bulls for semen production and natural service for use in the breeding programme being implemented by the States.

(c) & (d): As informed by ICAR National Dairy Research Institute, Karnal under the National Initiative on Climate Resilient Agriculture (NICRA-Phase-II) is undertaking a study with the objective to evaluate the impact of heat stress on milk production, quality parameters and the economics involved in indigenous and crossbred cattle. National Dairy Development Board is implementing National Dairy Plan-I for enhancing milk production and productivity of bovines including indigenous cattle breeds.
