

# National Bovine Genomic Centre for Indigenous Breeds (NBGC-IB)

February 14, 2020

**Source:** *PIB & Ministry of Agriculture & Farmers Welfare*

For initiating genomics among indigenous bovine breeds, it is proposed to establish the national-level genomic centre as “National Bovine Genomic Centre for Indigenous Breeds” under the Rashtriya Gokul Mission scheme. This Centre (NBGC-IB) is established as an **autonomous body for undertaking all activities related to the introduction of genomic selection procedures for production and supply of high-quality bulls of various indigenous breeds** in the country.

## **Duration**

This project is planned for a period of 4 years (2016-2020) at an estimated cost of 106 Crore. During the 1st phase of the project (year 1st & 2nd) five thousand animals will be recorded and during phase 2 (year 3rd & 4th) another five thousand records along with DNA samples will be contributing to the project pool.

## **Objectives of NBGC-IB**

- Improving breeding standards of Indigenous breeds
- To design and fabricate SNP genotyping chip for the screening of animals within the country
- To adopt a strategy for selecting high genetic merit animals in the breeding programme at the National level
- To select breeding bulls of high genetic merit at a young age
- To create the world-class referral facilities for SNP genotyping of Indian milch breeds on a commercial basis

for decision making about adopting an appropriate breeding plan

**Activities of NBGCIB are;**

- Establishment of Genomic laboratory
- Creation of reference population
- Establishment of bio-informatics centre
- Establishment of the herd of donor and recipient animals
- Production of high genetic merit young bulls
- Development of custom made genotyping chip
- Development of genomic selection equation

**Consortium for National Bovine Genomic Centre for Indigenous Breeds (NBGC-IB)**

Following agencies may be part of a consortium.

- Department of Animal Husbandry, Dairying and Fisheries
- ICAR Institutes – NDRI Karnal, CIRC, NBAGR and CIRB
- National Dairy Development Board
- National Institute of Animal Biotechnology
- Central Cattle Breeding farms
- Central Herd Registration Scheme units
- State Livestock Development Boards/State Animal Husbandry Departments
- State Milk Federations
- NGO's (BAIF Research Development Foundation)
- Private Genotyping Laboratories