

# LIVESTOCK-BASED PATHWAYS TO REDUCE METHANE EMISSIONS: ADAPTATION OF DAIRY FARMERS IN INDIA

## Methane emissions from Indian livestock

- India is the largest milk producer (230.5 million tonnes) in the world with the highest cattle (192 million) and buffalo (110 million) populations.
- The per capita emission is 24.2 kg CH<sub>4</sub>/animal/year and the total GHG emission from livestock is estimated at 247 Mt of CO<sub>2</sub> equivalent which includes 99.8% CH<sub>4</sub> and 0.2% N<sub>2</sub>O.



Breed Diversity



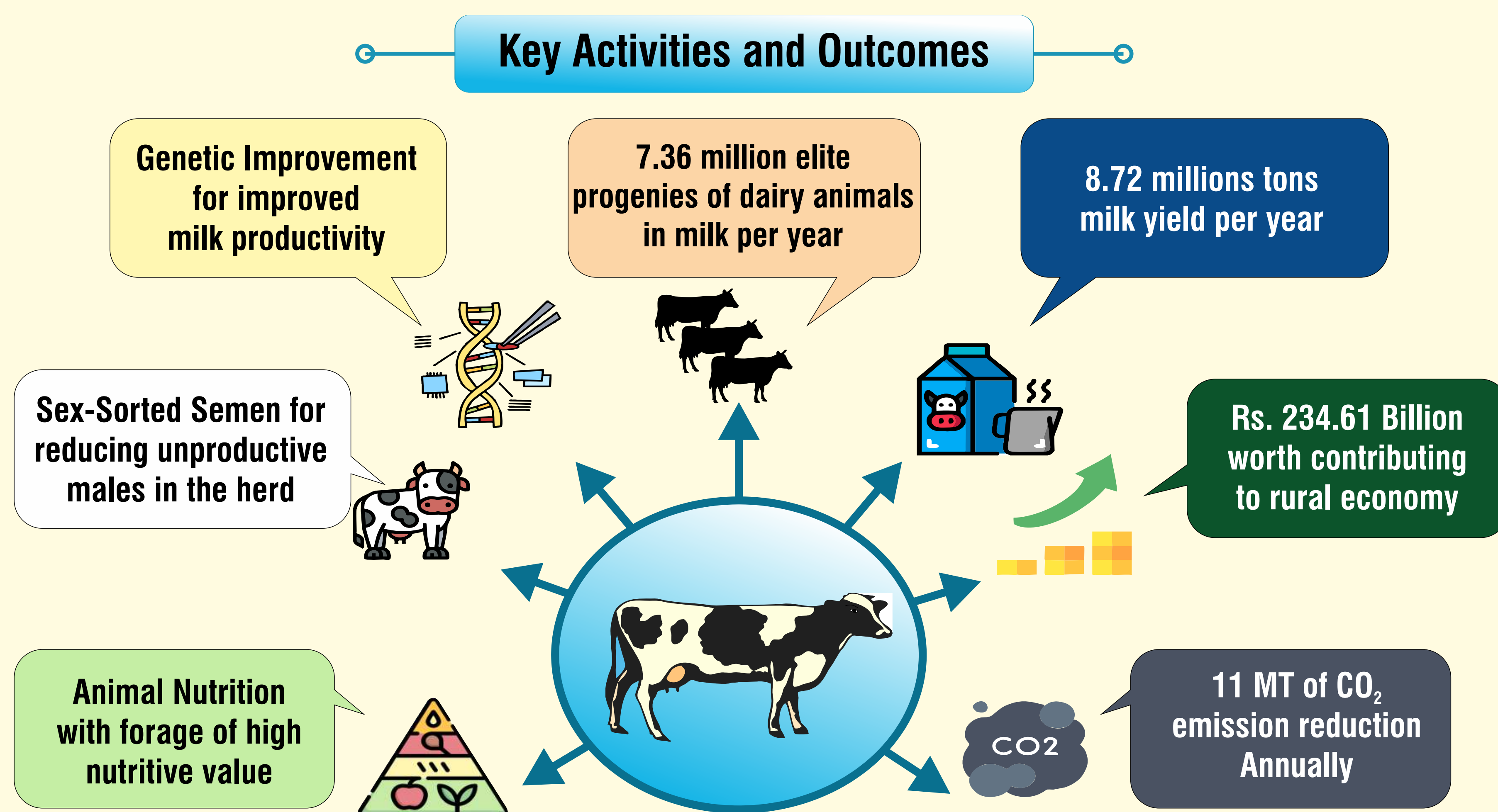
Door step AI service

## Technological interventions of BAIF

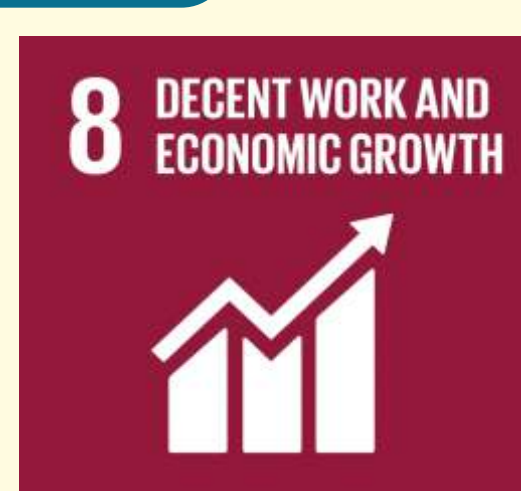
- Improve productive potential of dairy animals with the use of semen from bulls of superior Genetic potential
- Use of Sex Sorted Semen to increase productive dairy animals, reduce male, and maintain her size enabling reduced methane emission per liter of milk.
- Dung management by adopting Integrated Renewable Energy and Sustainable Agriculture (IRESA).
- Introduction of better fodder varieties.
- Support services for breeding, nutrition and health management

## Extension Strategy of BAIF

- BAIF's Livestock Development Centre (LDC) is the focal unit of intervention.
- More than 4500 CDCs in 13 states of India are in operation at present.
- Each LDC covers 10 villages, serving about 2500 female dairy animals consisting of indigenous and crossbred cows as well as buffaloes.
- Half of the LDCs are on a self-sustaining mode as farmers have gain significant levels of awareness on the climate smart dairy production technologies



### Impacted SDGs



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