# Livestock based Adaptation and Mitigation Pathways for Small Dairy Farmers in India

### **Methane emissions from Indian livestock**

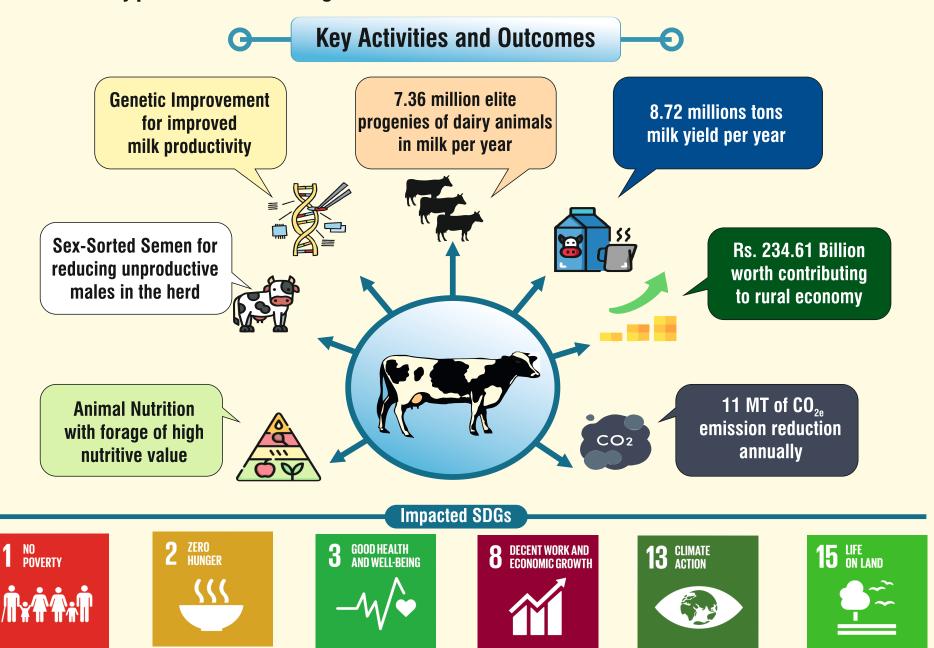
- India is the largest milk producer (230.5 million tonnes) in the world with the highest cattle (192 million) and buffalo (110 million) populations.
- The per capita emission is 24.2 kg  $CH_4$ /animal/year and the total GHG emission from livestock is estimated at 247 Mt of  $CO_2$  equivalent which includes 99.8%  $CH_4$  and 0.2%  $N_2O$ .

## **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 herd size enabling reduced methane emission per liter of milk.
- Dung management by adopting Integrated Renewable Energy and Sustainable Agriculture (IRESA).
- Inclusion of Haritdhara, An anti methanogenic feed supplement.
- 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 LDCs in 14 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







# **BAIF Development Research Foundation**

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