

productivity; (b) reduced cost of milk production; and (c) reduced methane emission. Average daily milk yield in milch animals across the participating states was 5.04 litres at appraisal, which increased to 5.80 litres at project closing. Data from INAPH shows that, in areas where RBP was implemented, per-animal daily milk yields increased from 7.07 litres to 7.34 litres (INAPH 2019). Using this parameter, annual incremental milk production due to RBP reached 0.26 million MT at project end, with corresponding annual incremental financial benefits of USD 11 million. Further, a major benefit of RBP has been the reduction in cost for milk production, an important incentive for producers' adoption of the programme. Prior to RBP, average per-kg cost of production was ₹19.49, which decreased to ₹17.19/kg (11.8 per cent for DCs and 8 per cent for DPCs, compared to the combined target of 7 per cent). Average cost of feeding was reduced to ₹136/animal/day from ₹143/animal/day which is, on average, a 5 per cent reduction in cost of feeding per animal per day (INAPH 2019). Annual incremental financial benefits due to reduced milk production cost reached USD 96 million in 2019.

The project conducted several methane emission measurement studies in different regions of the country to assess RBP's impact on dairy's carbon footprint. These studies found that, on average, RBP reduced methane emission by

13.3 per cent (compared to an estimated 10 per cent in ex-ante EFA). Prior to RBP, average annual methane emission across milch animals was 72 kg per animal, which reduced to 62 kg per animal. This reduced methane emission due to RBP amounted to 0.24 MT per animal per year of Certified Emission Reduction (CER). This has generated the potential for annual incremental economic benefits of methane emission reduction equal to USD 6.5 million at project end.

Key interventions

- **28.65 lakh** milch animals provided balanced ration in **33,374** villages under RBP
- Percentage reduction in cost of feeding per kg of milk for animals covered by RBP – **10.2%**
- **32,787** Local Resource Persons (LRP) trained
- Percent reduction in methane release per kg of milk through RBP – **13.8%**
- Land brought under fodder production – **6,03,720 ha**
- Increase in proportion of area under green fodder with certified/truthfully labelled seeds - **227%**
- **7** fodder seed processing plants established and **30,185 MT** fodder seed sold

