

contribution - about 0.2 per cent annual productivity growth. With project (WP), milk productivity due to greater emphasis on genetic improvement through HGM bull production has increased by 3 per cent for daughters of indigenous cows and 1 per cent for daughters of crossbred milking in 3rd year. For buffaloes milking in the 4th year, milk productivity due to improved genetics increased by 0.9 per cent. From the animal breeding programme through support to semen stations, milk productivity benefits started accruing on the 4th year. Average annual growth in milk productivity due to project-improved genetics up to the end of the project was 1.8 per cent compared to only 0.2 per cent WOP.

Reduced inter-calving period due to increased conception rate: Before the project, average AI conception rate for bovines was 35 per cent. By adhering to SOPs and training of AI technicians, combined with improved nutrition through RBP, conception rate has increased to 43 per cent. Since the start of RBP an average 4.5 million lactating bovines were inseminated annually, which resulted in reduction of inter-calving period by 12 days. Due to the reduced inter-calving period, annual incremental milk production reached 0.16 million MT in 2019.

With an average financial gross margin across lactating bovines of ₹3,204, annual incremental financial benefits due to reduced inter-calving period reached to USD 7 million. Reduced inter-calving period also increased producers' assets as they started accumulating new milch animals more rapidly.

Key interventions

- **2,185** high genetic merit bulls were made available for semen production through Progeny Testing programme
- **271** high genetic merit bulls were made available for semen production through Pedigree Selection programme for indigenous breeds
- **28** semen stations strengthened and **119.2 million** high quality disease free semen doses produced
- **12,322** new villages were covered under pilot model for viable doorstep AI delivery services
- AI done annually – **0.783 million**
- NDDB's animal breeding interventions under NDP I led to improved conception rate from **30% to 44%** and also reduced inter-calving period by **11-12** days

