

Economics of Dairy Farming on Different Farm Types in India**Smita Sirohi¹ and Amit Saha²**¹ National Dairy Research Institute, India ² International Farm Comparison Network, Germany

Introduction The economics of milk production in India varies widely across production systems that can be characterized according to level of input use, productivity levels, animal breed, farm ownership status, market arrangements for milk sale, etc.

Aim This study presents (i) a review of cost and return estimates, during past one decade, from local cows, crossbred cattle and buffaloes reared under smallholder production system in various parts of the country and (ii) the recent economics of typical household, family and future farms.

Methods IFCN typical farm approach is followed taking three types of representative farms from one of the leading milk producing state (Haryana) in India, i) household farm: small land and herd size (2-3), mostly rearing buffaloes ii) family farm: 10-20 crossbred animals reared mostly with family labour iii) future farms: >50 crossbred cows and hired labour. The whole farm data collected for 2017-18 was included in the TIPICAL model for analysis.

Results Review of studies based on field surveys indicated that gross cost of maintaining crossbred cattle is higher than that of buffaloes and local cows. In general, the gross margin is positive for crossbreds and buffaloes. But, by and large, the rearing of local cows for milk production is unviable, except where the input costs are low and common property resources are available.

TIPICAL model indicates entrepreneurs' profits in dairy enterprise increases with the herd size from USD1.5/100 kg SCM (solid-corrected milk) on household farm to USD7.6 and USD10.8 on family and future farms, respectively. The cost of milk production is USD 41.96/100 kg SCM on buffalo based farms and lower (about USD36-39) on cow based farms.

Conclusion The farms are economically viable but low-productivity of animals is a major challenge to sustain the profitability, especially as feed costs are increasing in the country.