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Assessing Improved Management Strategies and Technologies on Cost of Milk Production in Different Dairy Production Systems in Bangladesh: Implication for Dairy Development

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Abstract

The demand for milk production in Bangladesh is increasing faster than its production that widens the gap between milk supply and demand. This gap will continue to increase due to increasing urbanisation that will induce radical changes in demand. To respond to this market demand, it is necessary to increase milk production especially to supply the urban consumers but this increase milk production should be at competitive cost. This might be achieved once the farm applies improved management strategies while the policy might enhance the adoption of technology at farm level. Therefore, the objective of this study was to assess a set of management strategies and policies in traditional, extensive and intensive production systems in order to identify the suitable management framework for producing milk with competitive cost. This study utilised the method developed by International Farm Comparison Network (IFCN) which is based on the Typical Farm Approach (TFA) and Technology Impact Policy Impact Calculations (TIPI-CAL) model. First a "status quo or baseline" analysis was done and secondly 10 scenarios were developed and applied to the baseline farms. The cost of milk production in baseline farms were 43.46, 39.44, 34.67 USD/100 kg ECM (energy corrected milk) in traditional, extensive and intensive production systems, respectively. These costs were significantly reduced while those farms adopt improved management strategies and different technologies. The highest decrease in cost of milk production (37 %) was observed for using improved veterinary services (IM-VET) in intensive production systems while 24 % and 22 % can be decreased by using community based fodder production scheme (CB-FPS) in extensive production systems and establishing cooperatives (ES-COP) in traditional production systems, respectively. The baseline analysis clearly showed that intensive farms have competitive advantages in producing milk. The adoption of improved management and policy would further decrease the cost although the level of decrease is highest in intensive and lowest in traditional production systems. This study, therefore, might be useful to decide on dairy development strategies by using improved management strategies to increase milk production to feed the growing urban consumers at competitive price in the era of increasing urbanisation in Bangladesh.

Keywords: Cost of milk production, management strategies, policy, urbanisation

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