Mobile phone-based dairy feeding support tool

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Abstract: In Nepal, the dairy sector contributes 8 to the Gross Domestic Product, but average dairy animal milk yield is one- third of that of many developing countries. This is because of inadequate feeding, poor genetics and diseases. This study aimed to increase milk production of dairy cattle and buffalo through proper feeding management. The project collected locally available feeds forage, fodder, crop residues, agro-industrial by-products, analyzed their nutritional quality and entered the data as well as animal nutrient requirements in an app, a Feeding Support Tool FST, it developed for formulating least cost, nutritionally balanced rations and predicting milk yield. Animal feeding trials were conducted in three districts of Nepal in collaboration with the Department of Livestock Services DLS and Nepal Agricultural Research Council to examine the efficacy of the app. The data, analyzed as paired T-Test, showed that using the FST increased milk yield by cows and buffalo by 15 in one month and 7.7 in two months, respectively. Ninety five percent of farmers who tried the app reported an increase in milk yield. Heifer International Nepal, DLS and NDDB are working on scaling the FST to all DLS technicians and 1600 dairy cooperatives in Nepal.