MILK SUPPLY RESPONSE OF SMALL DAIRY FARMERS IN SRI LANKA

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The Sri Lankan Government has implemented diverse policy packages to develop the dairy sector since its economic interdependence. The current policy framework includes establishment of dairy villages, promotion of fluid milk consumption and continuation of minimum price policy. The success of these policies is determined by the behavior of small-scale dairy producers who possess the majority of the cattle population in Sri Lanka. The objective of this study is to asses the factors affecting milk supply levels of small holder dairy farmers in Kandy and Anuradhapura districts.

Two milk supply functions were econometrically estimated in log-log form treating quantity of milk supply as the dependent variable and the price of milk, the type of management system, herd characteristics, educational levels of farmers and awareness on livestock services as exogenous variables. Primary data gathered from 80 farmers in Yatinuwara Divisional Secretariat of Kandy District and Nuwaragam Palatha Central Divisional Secretariat of Anuradhapura District was used for the estimation. The supply functions were estimated using ordinary least squares.

The results of the econometric estimation reveal that the elasticity of supply with respect to own price is 0.276 and 0.209 for farmers in Kandy and Anuradhapura districts respectively. Educational level was a significant factor in Kandy district while management system, herd characteristics, and awareness on livestock services were significant factors in Anuradhapura district. The supply levels of milk were simulated to asses the impacts of setting a minimum price at Rs. 60 per liter. The results show that an increase in milk supply by 16.12% and 13.17% would have been observed in Kandy and Anuradhapura districts respectively in response to such a policy. It was also found that milk supply levels can be significantly improved by changing the management system, i.e. by adopting to semi intensive system (i.e., 22.40% and 13.17% for Kandy and Anuradhapura districts respectively). These results indicate that the behavioral responses of framers in the two geographical locations are different and such differences should be taken into consideration in designing policies.

Key words: Supply function, Smallholder dairy farming, Policies