Thesis Title	Impact of Technology Uses on Increasing Efficiency and Quality of Milk Production
Thesis Credits	12
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B.E.	2002

Abstract

Dairy Production in Thailand has continued and gradually increased for several decades. Although, a number of cows is increasing but milk production is not enough for domestic consumption. It is necessary to accellerate milk production through increasing cow's productivity as well as the number of milking cows. This study was conducted to determine the socio-economic and technology factors affecting in dairy production and expected that these factors are related and have impact for technological application. This research was done at Amphur Wangnamyen, Sakaew Province where 108 farms of all 505 farms were interviewed. Data were analysed by Statistical Package for the Social Sciences/For Windows (SPSS/For Windows).

The results revealed that most farmers interviewed were male 75%, aged between 31-50 years, educated 4 years in school, employed labour in farm, experienced in dairy production between 5-9 years. Average farm's areas had 20 rai and with average 20 cows per farm, net income was about 5,000-10,000 baht per month per farm. Most farms were small scale to medium scale which had average 8 milking cows per farm. Cow breeds were 75-87.5% crossbred Holstein Friesian. Average milk production was 9.5 kg. per cow per day which was higher than national average. The ratio of milking cows to dry cows was higher than standard ratio. Socio-economic factors were found to relate to knowledge (r_s= .147, $p \geq$ = 0.05), experience (r_s= .038, $p \geq$ = 0.05), farm scale (r_s= .372**, $p \leq$ = 0.01) and application of dairy technology (r_s= .108, $p \geq$ = 0.05). Most farmers had medium to high level of dairy production knowledge and application of dairy technology consisting of breeding, feeding, barn, disease, milking, resource and environmental management, and recording. These technologies related to milk productivity (r_s= .172, $p \geq$ = 0.05) and milk quality (r_s= .342**, $p \leq$ = 0.01). Furthermore, there were positive relationships among individual technologies, except barn technology which had negative relationships with breeding and recording but low influence and impact.

In conclusions, dairy technological application had impact on milk productivity. If appropriate technologies were used, these would help to improve and increase milk productivity and milk quality. Consequently, these will contribute to sustainable development of dairy production.