ABSTRACT

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FARMERS' APPLICATION OF DAIRY CATTLE PRODUCTION TECHNOLOGY IN CHAIPRAKARN, FANG AND MAETANG DISTRICTS, CHIANGMAI

BY

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The objectives of this study were to identify 1) personal and socio-economic status of farmers in Chiprakarn, Fang and Maetang districts, Chiangmai province; 2) dairy cattle production technology application of farmer communities in such districts; and 3) the farmers' problems and obstacles concerning the development of dairy cattle production. The data were collected by means of pretested interview schedules from 140 samples of farmers in the three districts, selected by simple random sampling, and analyzed by using the SPSS/PC+.

The findings revealed that most of the respondents were male, 44 years old on average, and completed compulsory primary education. They had an average annual income of 141,471.43 Baht, an average of 4 years dairy farming experience, and an average of 2 family members contributing to dairy farming. They had an average of 13 heads of dairy cattle per farm and participated in dairy production training twice a year on average. The respondents identified Livestock Promotion Officers as their source of information (66.43%). The percentage of farmers owning the

land for dairy cattle production was 80.00. Their average forage land area was 11 rai (1.76 hectares) per farm. The average distance from the farm to the milk collection center was 4 kilometers.

About 64 percent (63.57%) of the respondents applied dairy cattle production technology in their farm at a high level; 23.57 percent, a moderate level; and the rest (12.86%), a low level. The overall average application of technology was at a high level, ranking from the highest to the lowest as follows: 1) milking technique and milk treatment; 2) disease prevention and control; 3) feeding management; 4) breeding; and 5) housing and facilities.

The respondents indicated the problems of unreasonable milk purchasing prices offered by the milk collection center and lack of financial support to increase the number of dairy cattle on the farm.

The analysis of the relation among variables by using the Chi-square indicated that the respondents' experience in dairy farming was significantly correlated with feeding (χ^2 = 12.77, P = 0.004), housing and facilities (χ^2 = 29.47, P = 0.00), and breeding (χ^2 = 5.50, P = 0.004). Information access and contact with the officer was significantly correlated with technology application in feeding (χ^2 = 40.85, P = 0.000) and housing and facilities (χ^2 = 13.40, P = 0.000). Feed pasture management was significantly correlated with disease prevention and control (χ^2 = 14.37, P = 0.000) and the distance from farm to the milk collection center was significantly correlated with feeding (χ^2 = 6.99, P = 0.001).

It was also found that the production factor problems were significantly correlated with the farmers' application of dairy cattle feeding technique (χ^2 = 7.63, P = 0.006). The problem of readiness of extension personnel and related agencies was found to be significantly correlated with technology application of feeding technique (χ^2 = 11.81, P = 0.001) and dairy cattle housing and facilities (χ^2 = 5.47, P = 0.019).