## ABSTRACT

Abstract of thesis submitted to the Graduate School of Maejo University in partial fulfillment of the requirements for the degree of Master of Science in Agricultural Economics

## EVALUATION OF KNOWLEDGE AND UNDERSTANDING OF DAIRY CATTLE RAISING OF DAIRY COOPERATIVE MEMBERS IN CHIANGMAI PROVINCE

BY

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The objectives of this study were to investigate 1) general background of the member 2) test and compare knowledge and understanding of dairy cattle raising of cooperative members in Chiang Mai province 3) compare net farm income of cooperative members in Chiang Mai province 4) members' problem and difficulties in dairy farming after training.

The data were collected by structured questionnaire from 106 members of dairy cooperatives' members in Chiang Mai province, and analyzed by SPSS PC+ for frequency, percentage, mean score. correlation, and ANOVA.

The comparison of dairy cattle raising knowledge and understanding score average from members of 5 cooperatives revealed that the score from high to low were from Chaiprakam Cooperative' members (76.79), Maejo Dairy Cooperative members' (72.60), Maeon Dairy Cooperative members' (69.00), PatonghuayMoa Dairy Cooperative members' s (67.00) and Chiangmai Dairy Cooperative' members (63.45). The first three groups were classified as well operated group while the other 2 groups were classified as intermediate group.

Analysis revealed that the average after training knowledge and understanding on dairy cattle raising of farm among cooperatives was different. Maejo Dairy Cooperative' members had after training knowledge and understanding of dairy cattle raising more than Chiangmai Dairy Cooperative' members. Chaiprakarn Agricultural Cooperative' members had more after training knowledge and understanding than Maeon Dairy Cooperative' members and BanPatongHuayMoa Dairy Cooperative. Others had no significant after training knowledge and understanding of dairy cattle raising.

Comparison of net farm income from the same farm size among dairy cooperatives indicated that net income frams small farm were significantly different, but there was no significant difference among intermediate size farms. Chaiprakarn Agricultural Cooperative had more net farm income among other small farm members from Chiangmai Dairy Cooperative, Maeon Dairy Cooperative and BanPatongHuayMoa Dairy Cooperatives. There was no-significant difference among the rest of comparison.

Comparison of net farm income from the same method of dairy cattle raising indicated that there was no significant difference among cooperative members that raised dairy cattle by stall born or free stall born method. Significant difference in net farm income was found among cooperative members who practiced combination of stall born free or stall borns. Chaiprakarn Agricultural Cooperative' members had net

net farm income more than those members in Chiangmai, Maeon, BanPatongHauyMoa. Maejo Cooperative' members had net farm income more than those in Chiangmai, Maeon, and BanPatongHauyMoa. There was no-significant difference in the rest.

Comparison of net farm income classified by knowledge and understanding of dairy cattle raising among dairy cooperative indicated that members with different knowledge had different net farm income ( $\alpha = 0.05$ ). Those of excellent knowledge (score more than 80) had net farm income more than those members of novice (lower than 50), fair (50-59), and intermediate level of knowledge (60-69). The rest had no-significant different farm income.

The members revealed that their problem and difficulties in dairy farming after training were low quality roughage, shortage of grass in dry season, high prices of concentrated feed, dairy cattle diseases, and no cenception after artificial insemination. These problem were disinterested by dairy farmers resulting in unsuccessful cattle raising. Moreover, the dairy cattle farmers are still lacking of knowledge and understanding of dairy cattle raising for better net farm income.