

Suthida Chet – Singha 2015: The Study on Dairy Cattle Production System and Farmer's Self - Reliance: A Case Study in Thunglooknok Sub-district, Kamphaeng Saen District, Nakhon Pathom Province. Master of Science (Agricultural Research and Development), Major Field: Agricultural Research and Development, Faculty of Agriculture at Kamphaeng Saen. Thesis Advisor: Associate Professor Supaporn Thaipakdee, Ph.D. 106 pages.

The research aimed to study dairy cattle production system and farmer's self – reliance of dairy farmers in Thunglooknok sub-district Kamphaeng Saen district Nakhon Pathom province. The samples used in this study were 62 dairy farmers. The instrument used to collect the data was an interview. Descriptive statistics such as frequency, percentage and mean were used in data analysis. Inference statistics, multiple regression, was used to predict the self - reliance of farmers by determining the statistical significance at the .05 level.

The research on dairy cattle production system of farmers including selection in dairy cow, feed and feeding, housing and milk parlor, disease and sanitation, milking management and maintenance of equipment found that the farmers had knowledge in dairy production in high level in milking management and maintenance of equipment ($\bar{X}=7.89$) whereas the rest, selection in dairy cow, feed and feeding, housing and disease and sanitation were at moderate level $\bar{X}=3.35, 5.42, 3.63$ and 3.94 respectively. The self-reliance of dairy farmers was found; income from the sale of raw milk to the cooperative 53,198.02 baht/head/cow sale of calves, culling cows in the amount of 21,606.45 baht/year and dry cow dung in the amount of 12,962.58 baht/year. Fixed production costs of farmers were 3,347.36 baht/head/year whereas variable costs were 30,860.16 baht/head/year. There were also non - agricultural expenditure 68,175.81 baht/ household/year. When calculating the net income it was found that farmers must have at least three more production units (3 cows) in order have self – reliance. Studying about farmers self – reliance in 5 aspects; technology, economic, resources, psychology and social, it was found that they were at moderate level ($\bar{X} = 3.25$). When considering in detail psychology aspect was found at high level ($\bar{X} = 3.66$) whereas the rest, technology, economic, resources and social were at moderate level $\bar{X} = 2.83, 3.03, 3.38$ and 3.43 respectively. Indicator elements of dairy farmer's self – reliance which had statistically significance at the .01 level were the education of dairy farmers the P values were .002.

Student's signature

Thesis Advisor's signature

