Thesis Title

Sustainable Environmental Management in Beef Cattle Raising by Farmers in Chiang Mai Province

Author

Mr. Nattaporn Klaichid

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Thesis Advisory Committee

Assoc. Prof. Katin SrimongkolAdvisorAssoc. Prof. Rampaipan Apichatpongchai Co-advisorAssoc. Prof. Dr. Choke MikledCo-advisor

ABSTRACT

The objectives of this study were to investigate: 1) sustainable environmental management of fattening cattle by farmers in Chiang Mai, 2) relationships between socioeconomic characteristics of the farmers and sustainable environmental management, and 3) problems encountered. A set of questionnaires was used for data collection administered with 90 households in Doi Lor, Mae Rim, and San Sai districts, Chiang Mai province.

Results of the study revealed that most of the respondents (98.9%) reared fattening cattle with conditions. Details on sustainable and non-sustainable environmental management were used for analyzing the sustainability at a group level. This could make the respondents perceive a better holistic view. With regards to the sustainability in the environmental management, it was found that the respondents should take care and do corrective action on the fattening cattle rearing for increased sustainability in the future. However, the utilization of cattle feaces and wastes was found at a lowest level (the sustainability index = 33.3). This was followed by the method of cattle feaces and wastes collection (the sustainability index = 38.5). For the issue showing the sustainability of the environmental management, the feaces and wastes collection on farm was

found at a highest level (the sustainability index = 97.4) and fallowed by cattle ailment management (the sustainability index = 96.3).

With regards to an analysis of the relationships between socio-economic factors and the environmental management of the respondents by using Pearson's Product Moment Correlation Coefficient, it was found that the loan of the respondents had a relationship with the environmental management concerning with fattening cattle rearing with a significance level at 0.01. Likewise, the factor on being fattening cattle rearing group member of the respondents and staff contact had a relationship with the environmental management with a significance level at 0.05.

Based on the survey of problems encountered, it was found that most of the respondents lacked cattle pastural area (32.2%). Besides, there were problems in diseases and cattle health (13.3%). However, most of the respondents solved these problems by rearing cattle in public areas (69%) and asking for assistance of livestock office staff and concerned agencies (58.4%).

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