Abstract

The study on efficiency in the use of marl to improve acid soil for production and income aims to: (1) Examine acid soil condition that affects to the cost and return in paddy farm (2) Compare the cost before and after the use of marl to improve acid soil in paddy farm (3) Compare the return the farmer earn from paddy farm before and after the use of marl to improve acid soil. In this research, the data was collected from 95 farmers in Khlongluang district, Pathumthani province by using the questionnaire as tool. The obtained information was analyzed.

In the study, it was found that the cost before the use of marl was 3,821.61 Baht per rai. The average cost after the use of marl was 3,094.90 per rai. It can be noticed that before the use of marl to improve acid soil, the cost used for paddy farm was higher than the cost after the use of marl. Acid soil affects to paddy farm production since it hinders the normal growth of rice root. The plant will lack of nutrients necessary for growth and production. When the production is low, the income from selling rice is decreased. Thus, farmers seek for the solution by purchasing fertilizer to improve their production. This increases their cost. The average income form paddy farm before the use of marl was 5,620.69 per rai comparing to average income earned from paddy farm after the use of marl at 7,389.97 Baht per rai. After the use of marl, it was found that the income had increased at 31% after marl was used to improve acid soil. Net income from paddy farm before the use of marl was 1,799.08 Baht per rai. Net income after the use of marl was 4,295.07 Baht per rai. From the use of marl to improve acid soil, it was found worthwhile for soil improvement because it offered higher production as well as the income from paddy farm.