

Supawan Phupan 2011: Factors Affecting Farmers' Decision on Swine Waste Treatment System Alternatives in Nakhon Pathom Province. Master of Science (Resources Management), Major Field: Resources Management, Interdisciplinary Graduate Program. Thesis Advisor: Mr. Kampanat Vijitsrikamol, Ph.D. 184 pages.

The objective of the study were to obtain 1) socioeconomic background of the swine farmers and their current waste treatment system used on farm; 2) the suitable and technically possible waste treatment system for the study site; and 3) factors affecting farmers' decision on selecting waste treatment system. The sample were drawn from 78 swine farmers in Sam Khwai Phueak sub-district, Mueang district, Nakhon Pathom province. The analytical tools of the study comprised descriptive statistics and a multinomial logit model for analyzing the factors affecting farmers' decision on selecting waste treatment system.

The study reveals that major occupation of the farmers is full-time swine producers associated with aquaculture as their second occupation. On the average, the annual income derived from swine production and non-farm activities are 2,001,632 and 100,325 baht/household, respectively. The simple waste accumulating pond is found to be widely used among 83% of the swine farmers. This waste treatment system is considered to have limited efficiency.

The suitable and technically possible waste treatment systems, that the farmers are willing to try on, are stabilization pond, cover lagoon, and anaerobic filter, respectively. As such, the key factors affecting farmers' decision in selecting the waste treatment systems are technical and financial supports from the related agencies, information dissemination frequency, and non-farm income, respectively.

To promote the farmers in installing the technically appropriate waste treatment system on their farm, the related agencies such as Department of Livestock Development, Department of Agricultural Extension, Pollution Control Department, and local administrative organizations, should focus on the following issues: 1) continuously and constantly clarify and provide apparent information on efficiency of different waste treatment systems to the farmers; 2) financial support should be provided partially associated with the farmers' own investment on waste treatment installation; and 3) promote opportunities in searching ways of increasing in farmers' non-farm income.

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Thesis Advisor's signature