

Kanlaya Sumritwong 2009: A Comparative Study on Cost and Return of Long Bean under Bio and Chemical Long Bean Cultivation at Tumbol Padeng, Amphoe Kaeng Krachan, Changwat Phetchaburi. Master of Economics, Major Field: Economics, Department of Economics. Thesis Advisor: Miss Wallapak Polasub, Ph.D. 91 pages.

The objectives of this study are to study socio-economic background of long bean farmers, technological and cost structure of long bean production, and cost and return differentiation between bio and chemical long bean cultivation. The sample in this study is derived from purposive random sampling of long bean farmers in Tumbol Padeng, Amphoe Kaeng Krachan, Changwat Phetchaburi. The sample is divided into 2 groups of the bio and chemical farmers, with the same sample size of 10 farmers each.

The results show that the total costs of bio long bean production are 9,183.83 baht per rai, which is lower than those of chemical long bean at 11,897.42 baht per rai. The yield per rai from chemical long bean farming is 1,651.75 kilograms, compared to 1,153.57 kilograms for bio long bean farming. This shows that bio long bean cultivation provides lower yield than chemical long bean cultivation. The average returns are at 8,940.21 and 12,635.89 baht per rai for bio and chemical long bean production respectively. The chemical long bean farmers receive higher returns than bio long bean farmers because of their similar selling prices. In a sensitivity analysis, when the chemical cost increases by 35 per cent, the total costs of chemical long bean production increases by 1,028.68 bath per rai. In this case, the average returns from chemical and bio long bean productions are not very different.

In summary, the yield from bio long bean cultivation is lower than that from chemical yard long cultivation. However, the total costs of bio long bean yield production are lower. Therefore, if there exists a market for bio long beans where farmers can sell their yields at a higher selling price, the bio long bean cultivation will be worthwhile. This will create an incentive for long bean farmers to switch to bio cultivation.

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