

PRAPA MEKPIŞALPONG : COST AND RETURN ON INVESTMENT OF BITTER GOURD
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The thesis aims at the study of cost and return on investment of bitter gourd cultivation during 1988 to 1989 crop year. The research was based on a survey of 110 samples from the western part of Thailand using normal random sampling method; 60 samples from Ratchaburi 40 samples from Nakhon Pathom and 10 samples from Petchaburi.

The result of the study shows that the bitter gourd production yield was 935.12 Kilogramme per rai and the average cost of bitter gourd cultivation was 3,781.25 Baht per rai, which consisted of the average variable cost of 3,402.33 Baht per rai or 89.98% of the total costs and the average fixed cost of 378.92 Baht per rai or 10.02% of the total costs. Considering by weight, the average cost as a whole is 4.04 Baht per kilogramme, which consisted of the average variable cost of 3.64 Baht per kilogramme and the average fixed cost of 0.40 Baht per kilogramme. From the study the fertilizer expense was the highest cost for the cultivation supplies, the average cost was 323.56 Baht per rai or 8.56% of the total costs. Irrigating was the highest labour cost, the average cost was 344.88 Baht per rai or 9.12% of the total costs.

The average revenue of the bitter gourd cultivation was 6,312.06 Baht per rai, at the average price of 6.75 Baht per kilogramme. It was also found that the selling price depended on the quality of the bitter gourd and the market environment at the time of sale.

The analysis of the return from the bitter gourd cultivation, was concluded that the cash profit was up to 160.85% of the revenue. This high rate of return resulted from using of each farmer family's members work force rather than hiring employees to do the cultivation. The average rate of return on total costs and the contribution margin were 66.93% and 76.95%, respectively. The difference between average contribution margin and net profit or average fixed cost was 10.02% of total costs. The average rate of return on total revenue was 40.09%. From break even point analysis found that the break even quantity of production of the bitter gourd cultivation was 121.84 kilogramme per rai at the average selling price of 6.75 Baht per kilogramme and the break even price was 4.04 Baht per kilogramme at the average quantity of 935.12 kilogramme per rai.

The problems encountered in the bitter gourd cultivation are : the lack of the knowledge of fertilizers and the inadequate knowledge of pest control, which resulted in the higher cost of bitter gourd cultivation. Therefore the Government Authority such as Department of Agricultural Extension should provide the farmers with adequate knowledge concerning the use of fertilizer and pesticide, and also the information about marketing in order that the farmers will be succeeded in the bitter gourd cultivation.