

Thesis Title The Impact of Contract Farming on Production
Technology of Small Farmers in Chiang Mai
Province

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Abstract

The main objectives of the study are twofolds i.e. to analyse the impact of contract farming on production technology practiced by farmers via comparison of production functions of contracted and non-contracted farmers and to compare costs and returns of their production. Potatoes , tomatoes , soybean and vegetable soybean are included in the study.

The contracts between companies and farmers range from a close-to-perfect to a loose form . In the case of potato , the written contracts can be classified into 2 types : the companies make

direct contracts with the farmers. These firms provide credit and technical assistance . In return , the farmers must sell their product at the assured price . The other written contract is made with the farmer groups under district agricultural officers' supervision . The firms and officials together provide technical training once a year . The vegetable soybean farmers make the same contract as the first type of potato farmers with more technical advice given by the firm's experts . In the case of tomato , the middlemen only promise buying price orally . The processing companies never make contract with the farmers . All farmers in the study have experiences growing these crops before they contracted the buyers except the vegetable soybean farmers who have only experience in growing soybean .

Comparison of net returns over cash cost of potatoes shows that the net returns of the non-contracted farmers are higher than those of the contracted farmers (11,831 7,643 and 9,628 baht per rai respectively). This is due to the higher price received by the non-contracted farmers during the study period .

The returns of tomato production of non-contracted farmers are much less than those of contracted farmers (1,703 and 3,944 baht per rai respectively) due to insufficient water and difference in topography . The returns of vegetable soybean is about 3 times higher than those of soybean production (4,153 and 1,233 baht per rai) .

It is obvious that the production function of tomatoes of two farmer groups differ because of the different physical environment and those of vegetable soybean and soybean as different crops . In the

case of potato , the functions of two types of contracted farmers are not statistically different but they differ from that of the non-contracted farmers . The non-contracted production function of potatoes indicates having higher productivities of labor and seed than the contracted one . However , all groups of farmers in the study are operating at decreasing returns to scale which indicates the optimal range of input utilization pertaining to profit maximization .

The findings show that the buyers make contracts basically with the farmers who have experience with particular crops . Therefore , it can be asserted that the tendency for technology improvement via contract farming may be possible only for new crops such as vegetable soybean . Farmers decision regarding input utilization evidently bases on the returns to their investment .