

**RESOURCE PRODUCTIVITY ESTIMATES OF
PINEAPPLE FARMS IN UPLAND CAVITE**

THESIS

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ABSTRACT

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The study was conducted in Silang, Tagaytay, Indang, Alfonso and Mendez, Cavite from August to June 2019. It was conducted to determine the socio-economic characteristics of the pineapple farmers; describe the different characteristics of pineapple farms; ascertain the relationship between pineapple production and selected variables; determine the efficiency of the selected variables used by the pineapple farmers and identify the problems encountered by the pineapple farmers in the production.

A total of 185 participants were interviewed using interview schedule. Data were analysed using multiple regression and efficiency ratios.

Frequency counts, percentages, and means were used to describe the characteristics of the farmers and their farms.

The Cobb-Douglas production function was used to estimate the input-output relationship. EVIEWS software was used to run the production function. The ratio of Marginal Value Product (MVP) to the Marginal Factor Cost (MFC) or price of input was computed to determine the economic efficiency of the inputs used in pineapple production in Cavite.

The farmers in Cavite were generally older, more educated, and with an average of 23 years of experience in pineapple farming.

Most of the pineapple farmers had an average farm size of one hectare. They produced an average of 24 metric tonnes of pineapples per hectare. Majority of the pineapple farmers (45%) employed hired labor which utilized an average of 30 man-days in production.

Productivity estimates indicate that the volume of production of pineapple was significantly affected by the amount of fertilizer, farm size, and number of man-labor on a per farm basis, while on a per hectare basis the amount of fertilizer was the only significant variable that affected pineapple production. Estimates using the Cobb-Douglas production function found that the summation of the coefficient had a significant relationship with production.

The marginal value product for the amount of fertilizer, farm size, and number of man-labor were all over-utilized at the given price level of inputs used.

Pineapple farmers revealed that the price of fertilizer and inducer greatly affect the production of pineapple. Other problems were presence of pest and insects, high labor cost, low selling price, unfavourable weather condition and lack of capital.

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INTRODUCTION

Pineapple (*Ananas comosus*), a tropical plant with edible multiple fruit consisting of coalesced berries, named for resemblance to the pine cone, is the most economically important plant in the *Bromeliaceae* family. It is the third most important tropical fruit in the world after banana (*Musa* spp.) and Citrus spp. (Esiobu et al., 2014a). Important producing countries are Brazil, India, China, Nigeria, Mexico and Colombia. They produce the fruit primarily for fresh fruit markets and processing industry. Philippines ranked 4th on the list for world pineapple production (CADP Manuel, 2012). It is mainly grown for its fruits, either fresh or in processed forms. Pineapples may be cultivated from a crown cutting of the fruit, possibly flowering in 20-24 months and fruiting in the following six months.

In the Philippines, pineapple is extensively cultivated in the Northern Mindanao, SOCKSARGEN (Southern Cotabato, Cotabato province, Sultan Kudarat, Sarangani, General Santos City), Bukidnon, Bicol and CALABARZON (Cavite, Laguna, Batangas, Rizal, Quezon) for domestic and foreign markets either fresh and for processing. The Philippines is the second biggest pineapple-exporting country in the world next to Thailand. In 2009, 57,687 ha were planted to the crop with a total production of 2,198,497 MT (Arcelo, 2014).