

## **Cost Efficiency of Pineapple in the Northeastern of Thailand: GSP (Generalized System of Preferences) Revoked**

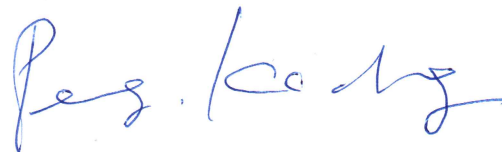
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### **Abstract**

Thailand produces more than 2.5 million tons of canned pineapple for export each year, making it the world's largest exporter. In 2018, the United States of America revoked the eligibility of canned pineapple from Thailand under the generalized system of preferences (GSP), which increased the cost of exports by 25%, thus causing a severe decline in pineapple prices for manufacturers and a direct impact on farmers' income. Because of this having been previously announced in 2015, manufacturers and farmers alike must have had time to prepare for the impact. The purpose of this research is to analyze the cost management of pineapple production in 2017/18 during this crucial situation in crop prices by using a stochastic frontier approach of 388 pineapple farmers in Loei and Nong Khai provinces in northeastern Thailand. The findings showed that the farmers earned an average price of only 2.53 baht/kg while the production cost per kg was 4.62 baht/kg, with 75.15 percent of farmers incurring losses. The empirical results for the specific situation showed that the cost frontier denotes using fertilizers that lack economy of scale and overproduction. Efficiency analysis revealed that cost inefficiency in farms increases with the farm size. Positive relationships between cost efficiency in plain area and spatial area, Nong Kai province, where the surroundings purchasing factories are located, was observed. According to technical efficiency ratings ranging from 1.00 to 50.17, with an average efficiency score of just 9.06, farmers have excessive wasteful spending in a loss-making environment and a lack of flexibility to respond in a severe reduction in product prices. Research results also suggested that contact with extension services that would recommend strategic management operations that support a predictable price crisis from cutting off commercial privileges that would affect many farmers.

**Keywords:** cost efficiency, GSP, stochastic frontier analysis, canned pineapple, technical efficiency



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