## **ABSTRACT**

BAWAG, DINA P. and PONIENTE, MARK IVEN A. Assessment of Coffee Post-Harvest Technology: Maximizing Productivity of Cavite and Batangas Coffee Farmers. Undergraduate Thesis.Bachelor of Science in Industrial Engineering. Cavite State University, Indang, Cavite. May 2017. Adviser: Engr. Willie C. Buclatin.

The study entitled "Assessment of Coffee Post-Harvest Technology: Maximizing Productivity of Cavite and Batangas Coffee Farmers" was conducted to evaluate the post-harvest technology used by coffee farmers that targets to improve the productivity of the coffee production in the provinces of Cavite and Batangas. Specifically, the study aimed to describe the socio-economic characteristics of the local coffee farmers in the province of Cavite and Batangas; describe the farm characteristics and economic information of the local coffee farms in the two coffee-producing provinces; identify and evaluate the post-harvest technology used by the local coffee farmers; identify the generated coffee by-products and evaluate the by-product utilization process applied by the local coffee farmers; identify the problems encountered by the local coffee farmers related to post-harvest technology; prepare a cost-benefit analysis of the coffee farmers in relation with the coffee post-harvest technology; and recommend the appropriate post-harvest technology for the local coffee farmers.

This study utilized descriptive method of research. Sufficient and accurate interpretation of result was involved in this methodology which described a certain present condition. A survey was conducted on Cavite and Batangas coffee farmers and data from the field study were collected and analyzed using descriptive statistics. The researchers used cost-benefit ratio for the determination of the appropriate technologies that will

maximize the farmer's productivity. It was used to assess the viability of technology adapted by coffee farmers. Also, the productivity of the coffee farmers was evaluated according to the rate of return on investment (ROI). A positive result means that returns exceed costs. With this, success was established in meeting the requirements and expectations needed.

With regards to cost benefit analysis, 286 participants were able to determine the cost benefit ratio. Breaking it down, 96 participants that are using selective picking, 157 participants using stripping, 24 participants in sun drying, one participant that use hulling machine and five participants that use grinding machine scored >1 which means the investment made is recovering. On the other hand, three participants using selective method and one participant using hulling machine scored less than one meaning, the investment incurred weren't recovering.

In terms of return on investment (ROI), farmers that are using machines were evaluated. In connection to this, two participants that are using hulling machine, one participant using roasting machine, and seven participants using grinding machine were able to provide a positive result of ROI percentage. Thus, indicating that the return exceeds the cost of investment.