

Title : A Study of Cost and Return on Investment of
Dragon - patterned Water Jar Production in
Ratchaburi Province

By : Mrs. Kannika Silapavilawan

Degree : Master of Business Administration

Major Field : Accounting

Thesis advisor : Panarat P

(Associate Professor Dr. Panarat Panmanee)

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This research is to study the dragon-patterned water jar industry in Ratchaburi, concerning its origin, present condition, production strategies, cost, return and problems, emphasizing on jar in the size of 8 kerosene can containing. Document studies as well as interview is used to collect data. Nineteen jar factories served as the sample of the study is divided into two sizes; the ten small ones, produced less than 20,000 units per year and the nine large ones, produced more than 20,000 units.

The results are as follows :

1. Production strategies as reported by the 100 percent of the sample and from the author's observation are the same. It is composed of bringing the mixture of clay and sand, at the proportion of 10:1, for a few days in the water before moulding it in the jar shape. Before attaching the dragon-pattern on its

surface, the moulder will smoothening its surface both inside and outside. It is dried in the furnace after enameling it with the mixture of water, clay, wooden ash, and indian color.

2. Cost for large factories is averagely lower than the small ones with 77.78 baht and 86.71 bath a unit. Selling price for the large factories, however, is higher than that of the small ones with 162.33 bath and 156.52 baht a unit respectively.

The analysis of the production value at the break even point of the large factories is 2,628 units a year while that of the small ones was 2,504 units. This is the number of jars where income equals to cost, or, in other words, where profits equals zero.

From the analysis and evaluation of the rates of return it is found that the return on investment (ROI), and return on sales (ROS) are 95.9 and 52.1 respectively for the small factories and 74.5 and 44.6 for the large factories. As for assets turnover, it is 1.84 times of the investment for the large factories and 1.67 times for the small ones. This shows that returns for the large factories are higher than that of the small ones.

3. There are three major problems in dragon-patterned industry, involving the following issues :

1. Material Quality. All the sample faced with the problem of low quality of clay which affected on low productive yield.

2. Labor. Lack of skill labors is another problem for all of the sample.

3. Firewood. Firewood is increasingly scarce and expensive. A large amount of investment has been spending on keeping firewood in reserve.

4. Technology. Productive technology is out of date. Conventional technique has been employed without development. This provided lower productivity than it should be.

5. Packing. Packing for long-distance transportation to the market is very limited since earthen jar is very easily broken.

6. Marketing. Limited marketing dues to substitution of other products for earthen water jars made jar industry improve and develop its products by emphasizing on quality and design in order for their beauty as well as higher selling price.