

CHAPTER VII

CONCLUSIONS & RECOMMENDATIONS

The proposed plant will require US\$138.9 million total capital investment in 1979, and, with natural gas price at \$4/MM Btu and ammonia selling price at \$400/ton the internal rate of return is 22.5% When natural gas price varies to \$5 and \$6/1,000 cu.ft. the internal rate of return are 17.2% and 12.0% As no bulk selling of anhydrous ammonia is done in this region and the cost of storage of ammonia is rather high, an additional process to utilise the ammonia to the end product is recommended. For Thailand, the major application of ammonia or its end products is in agriculture, the 22.5% internal rate of return of the ammonia plant is justifiable for a further study of a fertilizer complex.

The fertilizer complex utilizing ammonia should be made as this will abolish the problems of storage and will route the process to the desired products. However, a portion of the ammonia and its products should be destined for other desired purposes. The fertilizer complex considered should comply with the fertilizer demand in Thailand in nitrogen, phosphorus and potassium nutrients.

In considering the project, several other criteria other than the economic consideration should be made by the government for promotion. They are:

- 1. saving of currency of import of fertilizers to Thailand which cost several billion Bahts a year,
 - 2. in case of export, a gain of currency from other countries,
 - 3. steady and certain supply of fertilizers in the country,
 - 4. transfer of technology to Thailand,
 - 5. work provision to a number of people in the market,
- 6. auxiliary industries, besides the fertilizer project, which will provide both technology and work in the country.





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