Orntada Petchploy 2006: A Financial Feasibility Analysis of Investment on Refining

Bio-Diesel from Physic Nut in Changwat Rayong. Master of Economics (Business

Economics), Major Field: Business Economics, College. of Graduate Studies. Thesis

Advisor: Associate Professor Sri-on Somboonsub, M.S. 124 pages.

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The objectives of this research aim to 1) study the cultivation and utilization of physic

nut 2) perform the Financial Feasibility Analysis of Investment on Refining Bio-Diesel from

Physic Nut in Changwat Rayong and 3) perform sensitivity analysis of the project investment

The result of the study shows that the cost of cultivation Physic nut area of 1 rai is

12,038 Baht (production of 177 plants per rai at 3x3 meters) or 68 Baht per plant for the first

year. For the years that follow only maintenance and cultivation cost prevail. The production

yield depends on plant maintenance and management. The financial feasibility study of Bio-

Diesel plan scale 2,000 liters / day indicates that, if the cost to buy Physic nut was 4 Baht/Kg,

sales price Bio-Diesel 19 Baht/liter, Glycerin 30 Baht/Kg and the sales cost of Physic nut's

tailings was 3 Baht/Kg as long as the project exists, Bio-Diesel plant business is not feasible

since NPV was -7,821,147 Baht, the IRR was 6% and Payback Period was more than 10 years

the sensibility analysis shows that the minimum prices of Bio-Diesel to sales has to be above

21.55 Baht/liter to make the srofit feasible. Therefore, it can be concluded that it was not

profitable to invest in Refining Bio-Diesel Capacity 2,000 liters / day Plant from Physic Nut at

Changwat Rayong base on the Bio-Diesel price at 19 Baht/Liter.

Drion Domboonsup 18/05/06

Student's signature

Thesis Advisor's signature