

BAB XII

KESIMPULAN

XII.1. Diskusi

PT INDOCASTORIC merupakan perusahaan yang menghasilkan produk berupa *Drying Oil* yang dapat digunakan untuk memenuhi kebutuhan cat minyak dari para produsen cat minyak di Indonesia. Bahan baku yang digunakan adalah minyak jarak yang diekstrak dari biji jarak kepyar yang di Indonesia juga masih belum berkembang namun memiliki potensi yang baik baik dari nilai ekonomisnya. Tujuan didirikannya pabrik ini adalah dikarenakan belum adanya pabrik DO di Indonesia sehingga bisa membuka potensi yang baru serta membuka juga lapangan pekerjaan di Indonesia.

Kelayakan dari pabrik PT INDOCASTORIC ini dapat ditinjau dari beberapa aspek berikut ini :

A. Segi Bahan Baku dan proses

Bahan baku yang digunakan disini adalah biji jarak kepyar yang memang sempat mengalami penurunan pertumbuhan di Indonesia namun sebenarnya memiliki potensi yang besar dan memiliki manfaat yang banyak. Salah satunya dalam industri cat minyak di Indonesia.

Proses yang digunakan untuk mengekstraksi minyak dari biji jarak kepyar adalah proses *hot press* dengan menggunakan ekspeller di suhu 70°C yang kemudian akan di murnikan terlebih dahulu minyaknya. Setelah itu digunakan metode dehidrasi minyak jarak dimana proses ini lebih menguntungkan dibandingkan mengubah gugus minyak menjadi asetil dengan proses asetilasi terlebih dahulu sedangkan untuk proses dehidrasi dapat dilakukan secara langsung dengan bahan baku dan energi yang lebih sedikit. Kondisi operasi dilakukan pada suhu 210°C dengan menggunakan katalis NaHSO₄. Nantinya minyak jarak terdehidrasi ini akan disimpan di dalam tangki penyimpanan.

B. Segi Lokasi

Pabrik PT INDOCASTORIC akan didirikan di kawasan Situbondo, Jawa Timur dikarenakan pada salah satu desa di Desa Sumber Pinang lebih tepatnya terdapat tanaman jarak kepyar tumbuh sehingga kaya akan biji jarak kepyar. Diharapkan kedepannya akan terjalin hubungan kerja sama antara pabrik dengan penduduk untuk membangun sebuah perkebunan yang bertujuan untuk memenuhi kebutuhan pabrik sehingga tidak perlu lagi dilakukan impor untuk memenuhi kebutuh pabrik. Selain itu, banyak juga pabrik cat yang masih memproduksi cat minyak di sekitar daerah Jawa sehingga untuk menawarkan produk jadi lebih mudah bagi pabrik cat yang memiliki domisili di daerah Jawa.

C. Segi Ekonomi

Kelayakan pabrik PT INDOCASTORIC dari segi ekonomis dapat ditinjau dari bab XI yaitu analisa ekonomi dimana :

Laju pengembalian modal atau ROI serta ROE sesudah pajak memiliki nilai diatas bunga bank yaitu 21,7 % dan 33,29 %. Waktu pengembalian modal sesudah pajak didapatkan nilainya selama 4 tahun 8 bulan dimana, waktu pengembalian masih tergolong wajar karena waktunya dibawah 10 tahun. Bila ditinjau dari BEP, nilai BEP dari PT INDOCASTORIC adalah sebesar 41,7602 % dimana masih memenuhi standard sehingga pabrik layak didirikan

XII.2.Kesimpulan

Pabrik : PT INDOCASTORIC

Kapasitas : 16.500 Ton/tahun

Bahan Baku : Biji Jarak Kepyar

Sistem operasi : Kontinu

Jumlah Tenaga Kerja : 112 orang

Utilitas :

a. Air Sanitasi = 5,896 m³/jam

b. Air Pendingin = 15,907 m³/jam

c. Air Proses = 0,2451 m³/jam

d. Steam = 0,7356 m³/jam

Dowtherm A = 21.808,314 kg/jam

Listrik =1.397,23 kW/hari

Analisa Ekonomi :

- a. Return of Investment sebelum Pajak = 28,71 %
- b. Return of Investment setelah Pajak = 21,7 %
- c. Rate on Equity sebelum Pajak = 45,53 %
- d. Rate on Equity setelah Pajak = 33,29 %
- e. Pay Out Time sebelum Pajak = 3,83 tahun
- f. Pay Out Time setelah Pajak = 4,69 tahun
- g. BEP = 41,7602 %

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