

CHAPTER 4

ANALYSIS OF FINDINGS

Section 4.1 DATA ON TARGET MARKETS

In determining the target market we have to analyse the available data which was earlier presented in Chapter 2.

Out of the seven ASEAN countries in Table 2.3, only Malaysia, Thailand and Singapore have local LDPE producing plants. All the countries do rely on imported LDPE products to fill their demand for it, except for Singapore. Although, Singapore has only one company producing LDPE, it is more than sufficient to meet their significantly low local demand.

In Table 2.4, the local production in the countries within the Indian sub-continent and China are presented. These are two other major targeted markets for the LDPE from PETLIN. The countries in the Indian sub-continent are India, Pakistan, Bangladesh and Sri Lanka.

India is the sole country in the Indian sub-continent that produces LDPE and even that volume is insufficient for the demand of that country itself. They therefore rely on foreign supply to fulfill their demand. The other three countries do not have a single LDPE producing plant, so the end-users fully rely on the imported products for their usage.

China is the largest market for the LDPE globally. There are major local suppliers but due to the massive demand China still imports LDPE. The end products are sold domestically, as well as exported. Some of the end-users are not strong financially but they are able to work in a market economically termed as a "Captive Market".

In a Captive Market the sellers of the raw material, the LDPE in this situation, sells their product with the condition that the end-users eventually sells the end-product back to the producers of the LDPE. This system enables the end-users to attain the raw material and work on them by utilising a relatively smaller portion of their capital outlay. The producers on the other hand, will

also be able to purchase the end products from the end-users at a price lower than the current market level.

With the demand, supply and imported volumes into these respected countries established, MITCO would be able to analyse and determine the market options for them. The targeted countries would be mainly the ones whereby the demand outbalances the local supply, as well as the ones without any local supply but relying solely on the imported volume.

Section 4.1.1 Demand In Target Markets

The total demand in the countries within our targeted region, which is the Asia Pacific, will increase from the year 2000/01 up to the year 2004/05. This demand would be a gradual increase caused by expansion in the end-user applicants industry.

The total demand for the ASEAN countries is forecast to increase from 424,000 metric tons in the year 2000/01 up to 536,000 metric tons in the year 2004/05 (Source: The Polyethylene Trader, July 2001). This is with the major increment mainly to be experienced in Malaysia (due to the start-up of the PETLIN project), Thailand, as well as Indonesia.

As for the demand in the Indian sub-continent, it is currently at 254,000 metric tons for the year 2000/01. There is only a gradual forecast increment up to 300,000 metric tons expected in the year 2004/05, (Source: The Polyethylene Trader, July 2001). This increment is only going to be experienced in the Indian market. As for the three (3) other countries in the Indian sub-continent, the demand will remain unchanged from the year 2000/01 up to the year 2004/05.

Moving into the largest market, which is China, there will be a vast increase for the demand during this five (5) year period 2000/01 to the year 2004/05, (Source: The Polyethylene Trader, July 2001). The current demand for the

year 2000/01 is at 1,220,000 metric tons. The increment percentage remains almost consistent during this five year period at a level of almost five percent (5%) per annum. However, due to the increment in the actual volume, the demand for the product also increases by a larger volume every year. This is why the demand for the year 2004/05 is forecast to hit a new high of 1,490,000 metric tons.

Section 4.1.2 Supply in Target Markets

Moving into the LDPE supply of the Asia Pacific targeted regions, the current total supply is 1,617,000 metric tons for the year 2000/01. The producers in China provide a fraction more than half of this total. The Chinese LDPE producers produce 820,000 metric tons at the moment. With the expected capacity increment of 200,000 metric tons per annum in 2002/03 due to the plant expansion by Beijing Yanshan, the local supply in China will increase to 1,000,000 and is forecast to remain at that level until the year 2004/05.

There is no expected expansion of any LDPE plant in the ASEAN countries or even of a development of a new LDPE plant during this five (5) year period, from 2000/01 to 2004/05, apart from the PETLIN project. The major producers in ASEAN are Titan Petrochemical Pte. Ltd. (Titan) in Malaysia, Thai Polyethylene (TPE) company in Thailand, Thai Polyolefin Industry (TPI) also in Thailand and The Polyolefin Company (TPC) in Singapore.

For the year 2000/01, the current capacity of Titan is 178,000 metric tons per annum and this volume will be increased and maintained from thereon at 188,000 metric tons in the year 2001/02. The volume of production that is approximately 90,000 metric tons per annum by TPE currently is expected to remain the same for the next five (5) years. 120,000 metric tons per annum is the current production by TPI and the planned production increment is approximately two percent (2%) per annum. Finally, TPC produces 250,000 metric tons per annum currently and will continue to supply this volume consistently for the next five (5) years.

As for the Indian sub-continent, it has already been stated that the only country producing LDPE there is India. This production is solely by the Indian Petrochemical Limited (IPCL). IPCL have two (2) plants at Baroda and Nagothane with a capacity of 80,000 metric tons per annum each. They have no expansion plans during this next five (5) year period or even a thought to develop a new plant. Although there is a rumour that the Baroda plant could be taken over by the Indian Oil Company. All the same, this does not alter the total supply volume by the local companies in India.

Section 4.1.3 Imports into the Target Markets

There are a few major suppliers from outside these targeted countries region who play a major role in these markets. These companies have excess LDPE from their plants' production after providing the raw material into their domestic market. The major suppliers of LDPE in this region are QAPCO, a petrochemical company from Qatar; SABIC, the Saudi Arabian Industry of Chemicals; and TPC of Singapore.

QAPCO is mainly located in Umm Said. They have two (2) plants, one (1) operating since 1980 with a capacity of 190,000 per annum and the other one (1) operating since 1997, producing 180,000 metric tons per annum. In June 1991, Autochem, Enichem and the QATAR government have agreed to have a joint-venture marketing company, with the share being ten percent (10%) for Autochem and Enichem respectively and the QATAR government receiving the remaining eighty percent (80%) of the market share.

The brand name for QAPCO products is Lotrene. Currently, Autofina (formerly known as Autochem) has been given the right to sell the Lotrene products. In terms of channel distribution, the three (3) joint-venture companies split their sales based on regions. Based on the countries that fall in these three (3) regions, Autofina holds the distribution rights for most of this study's targeted countries, these countries being Singapore, Indonesia,

Vietnam, India, Sri Lanka, Malaysia, Philippines and even China.

SABIC is already a strong supplier of LDPE within its region. They have planned to construct a large HDPE and LDPE swing plant called Jubile United, which would have a capacity of 450,000 metric tons per annum. On top of that, they have a "debottlenecking" expansion in the year 2004 that would increase its polyethylene and polypropylene production by five and a half (5.5) million metric tons per annum.

SABIC will further compress the LDPE market by producing an extra one and a half (1.5) million metric tons of polyethylene products in the year 2004. The total polymer target set by SABIC is forty (40) million metric tons and fifty (50) million metric tons per annum by the year 2005 and 2010 respectively .

Although TPC of Singapore only produces 250,000 metric tons per annum, they play a major role in the LDPE market in this region. This is due to the fact that the demand for LDPE in Singapore is almost negligible. The demand is approximately 14,000 metric tons per annum, enabling TPC to venture into the international market with its production.

Another strong contributing factor for placing TPC as a major exporter into the countries in this region is its geographical location and its port service. The location of Singapore is right in the centre of our targeted region of the Asia Pacific countries. Singapore, in possessing a port of such an established standard enables TPC to ship out its production via mother vessels directly to its customers without needing to utilise any feeder vessels, and this certainly would be a cost saving factor for TPC.

Section 4.2 SELECTING TARGET MARKETS

Based on the data of the demand and supply, locally and imports, in these selected nations, which is the Asian-Pacific and Indian sub-continent nations, China is a market that must be penetrated by MITCO. Although, importers

already swamp it whereby China depends on 25% - 30% of its large demand on imported products, there still is room for MITCO to penetrate with its product.

From the total demanded volume in China, MITCO has to constructively plan an effective marketing strategy to attain a fair share of the imported LDPE products into China. Considering the massive PETLIN production volume to be attributed for the international market, the volume allocated for China will be a significant factor as far as the marketers in MITCO are concerned.

The other region for which planning must be made for exploration based on the data above is certainly the countries in the Indian Sub Continent. The countries in this region rely on an imported LDPE volume of approximately 100,000 metric tons currently and this volume will increase by almost ten percent (10%) every year for the following five (5) years. This is due to the fact that there is only one (1) supplier of LDPE (IPCL) in this region and there are no plans for any expansion to their production volume (160,000 metric tons per annum).

Section 4.2.1 Volume for each Selected Country

The total volume of LDPE from PETLIN to be distributed by MITCO is 130,000 metric tons per annum. From this total, an amount of 25,000 metric tons (which is approximately 20% of this volume), can be absorbed by the domestic demand in Malaysia. This leaves the marketing team within MITCO with the remaining volume of 105,000 metric tons to be allocated for specific countries within the targeted region.

China is the main target country after considering its demand and supply, whereby its imported volume for the year 2001/02 would be 480,000 metric tons. Therefore, to target to send into China 50,000 metric tons for that year is reasonable, whereby it will only be slightly higher than 10% of the volume it depends on from foreign supply for 2001/02. 50,000 metric tons per annum is

almost 50% of Petronas's share of PETLIN's production, which is allocated for the international market.

PETLIN is scheduled to begin its production onstream from November 2001. DSM has a contract with MITCO and Polifin of South Africa whereby it is agreed that DSM can only market their share from the PETLIN LDPE production into China for the first two (2) years of the PETLIN production. Thereafter, in the year 2003/04, the LDPE market of China for the PETLIN production would only be open to MITCO and Polifin of South Africa. At this time, China would be facing a total demand of 1,410,000 metric tons per annum (as illustrated in Table 2) and its local supply would be 1,000,000 metric tons per annum. Therefore, it will be experiencing a shortage of supply of 410,000 metric tons.

Indonesia is the next major target for MITCO with their current demand being 80,000 metric tons per annum. There is a forecast growth in their demand of a consistent 5,000 metric tons per annum for the next five (5) years. Imported products provide the entire supply due to the fact that there is no local supply at all in Indonesia and therefore this is why MITCO should target initially more or less 25% of their current demand (20,000 metric tons per annum).

MITCO has to fully utilise their marketing manager based in Indonesia for this targeted volume. The geographical location of Indonesia and Malaysia is another positive aspect to be taken into consideration on why such a large volume is allocated for Indonesia. This would mean that the relatively lower shipment freight transportation cost for the LDPE distribution from PETLIN to Indonesia in comparison to other LDPE producers would be a significant advantage factor in the pricing of the product.

Philippines is another target for MITCO to ship out its LDPE from PETLIN. MITCO, also, has a representative marketing manager already based in Manila, whom they should use to assist them in the marketing of PETLIN's LDPE products. The current demand being a significant volume of at least

50,000 metric tons per annum, with the entire demand of the Philippines LDPE market being supported by foreign producers.

MITCO should at least target 10% of this required product in Philippines. With the additional forecast of a steady increment of 3,000 to 4,000 per year, MITCO should initially target to market 10,000 metric tons into this country.

Another country that relies totally on imported products for its LDPE products is Vietnam. Also being able to utilise MITCO's marketing manager based in Vietnam, MITCO should compete and target at least twenty percent (20%) of the current market share. With the total demand for LDPE in Vietnam currently being 29,000 metric tons for the year 2000/01, this would mean that the targeted volume into Vietnam should be a mere 5,000 metric tons per annum.

The final targeted region would be into the Indian sub-continent countries, whereby 15,000 metric tons per annum should be the targeted marketing volume of the LDPE from PETLIN. With India's demand growing, by approximately 5% every year and their local supply remaining consistent at 160,000 metric tons per annum, the current shortage in India's market alone is 46,000 metric tons per annum.

This overbalance in demand in comparison to the market's supply would certainly grow larger during the next five (5) years due to the fact that there is no plans by any company within India to build a new LDPE production plant, or an expansion, by the only LDPE producer in India, IPCL. Overall, there is an imported volume of 102,000 metric tons of LDPE into the Indian sub-continent nations for the year 2001/02. Therefore, penetrating a market and obtaining approximately 15% (15,000 metric tons) of this volume should be MITCO's marketing target.

The remaining LDPE volume of Petronas's share from PETLIN could be distributed into Myanmar, as well as other requesting companies with

reasonable market value prices. The market of all these stated countries would also be able to absorb any other unsold products from the domestic allocation.

Table 4.1 illustrates the percentage and volume recommended to MITCO of the imported volume of LDPE by these MITCO targeted countries.

Table 4.1 The percentage targeted by MITCO of the targeted countries' imports (Volume in '000 MT)

	TOTAL DEMAND	IMPORTS	MITCO'S TARGET VOLUME	MITCO'S TARGET % FROM COUNTRY'S IMPORT
COUNTRY				
China	1,280	480	50	10.4
Indonesia	80	80	20	25.0
Philippines	53	53	10	18.9
Vietnam	29	29	5	17.2
Indian Sub-cont.	262	102	15	14.7