INDUSTRY ANALYSIS

Nestle Malaysia uses two models to determine the potential success of the introduction of the malt-based beverage into the market. These are followed by the cost considerations and reductions of the production processes in line with the transnational strategy of Nestle.

5.1 SWOT ANALYSIS

In general, a business unit has to monitor key macroenvironment forces (demographic, economic, etc.) and important microenvironment actors (customers, competitors, etc.) that affect its ability to earn profits.

It is one thing to discern attractive opportunities and another to have the competencies to succeed in these opportunities. Each business needs to evaluate its internal strengths and weaknesses periodically (Kotler, 2000).

Before proceeding with the above on the first objective of this study, please take a look at the various products of Nestle and their respective positions in the market as illustrated in Table 5.1.

Looking at the category health fortified drink, there is only one Nestle brand-Milo, and it holds the market leader position. Reverting to the first objective, this is where it is fundamental to use the four facets of this analysis to see whether Milo should have a locally manufactured sister brand to consolidate Nestle's market share in this category.

5.1.1 STRENGTHS

Milo, as of 1999, holds a market leadership position of about 65% (Nestle Internal Records). It is a ubiquitous sports drink, fulfilling the third strategy pillar of Nestle Malaysia's current Managing Director - Mr Jose Lopez, that is "Product availability: whenever, wherever, however." Milo has gained a mindshare stronghold on the consumers, and it is one of the most recognisable brands in Malaysia. In fact, stalls, cafes and coffee shops used the name "Milo" even if the chocolate-based beverage they serve isn't so. Milo

TABLE 5.1 NESTLE MALAYSIA'S MAIN PRODUCTS, COMPETITORS, AND MARKET

LEADERSHI	PPOSITION		
PRODUCT CATEGORIES	NESTLE BRANDS	KEY COMPETITORS	MARKET LEADER
Infant Formula	Lactogen, Nan	Dutch Baby, Snow Dumex	Lactogen, Nan
Hot Cereals	Nestum	Quaker	Nesturn
Breakfast Cereals	Nestle's Milo, Koko Krunch Honey Stars, Comflakes Gold	Kellogg's Cornflakes, Frosties, Chocos	Nestle
Health Fortified Drinks	Milo	Horlicks, Vico, Ovaltine	Milo
Milk Powder	Nespray, Klim, Everyday	Femleaf, Dumex Dutch Lady	Femleaf
Sweetened Condensed Milk	Milkmaid, Teapot	F&N, Dutch Lady Yeo Hiap Seng	F&N
Instant Coffee	Nescafe	Indo Cafe, Maxwell Dankaffe	Nescafe
Noodles	Maggi	Cintan, Mamee, Myojo, Indomie	Maggi
Cold Sauces	Maggi Chilli Sauce Maggi Tomato Sauce	Kimball, Heinz, Life	Maggi
Chocolate	Kit Kat, Smarties, Nestle Crunch	Cadbury, M&M, Mars Snickers, Time-Out	Cadbury
Sweets	Polo, Fruitips	Mentos, Sugus, Trebor Hacks	Mentos
Yoghurt	Nestle	Danone, Dutch Lady	Danone
Yoghurt Drink	Nestle	Vitagen, Nutrigen	Vitagen
Juices	Libby's	Marigold, F&N, Dutch Lady	Marigold
Ice Cream	Nestle	Walls	Nestle

(Source: Nestle Internal Records - Competing Brands and Position, 1999-2000)

is synonymous with chocolate-based beverage, and it is even easier to pronounce than chocolate. Due to Milo's active promotion of sports events, Nestle enjoyed a very good rapport with the Malaysia government. Its factory opening in Chembong was officiated none other than by the Malaysian Prime Minister himself, Datuk Seri Dr. Mahathir. Nestle Malaysia has won numerous awards such as the PM's Hibiscus Award in 1997 by its Raja Muda Factory for manufacturing and environment quality. Its brand image is very strong. The likelihood of success of a sister brand in a malt-based beverage is very high with the influence of the Milo and Nestle brands.

5.1.2 WEAKNESSES

The second internal factor of the SWOT analysis deals with the weaknesses involved in the implementation of the objective. The obvious weakness is the sense of arrogance and complacency among the sales team due to the continued success of the Milo brand. Even though Milo has a market share of about 65%, it has not reached the 70% mark since the late 1980s. Any new entrant will definitely take a share of Milo's percentage if the taste, price and quality are deemed to be close. There is a real need for Nestle Malaysia to identify new niches to stay competitive in this category of the market. With the introduction of a malt-based beverage, it may encounter initial start-up cost which may be prohibitive but due to the synergy of the Milo plant equipment and similarity in production processes, this reservation may prove to be unfounded. Another fear, which suggests the possibility that this malt-based sister brand may cannibalise Milo's share, is minimal, as Milo is more of a chocolate-based beverage. If consumers decided to switch from chocolate to malt, they would have done so when Horlicks was first introduced.

5.1.3 OPPORTUNITIES

The extension of the malt-based product would present a great opportunity for Nestle Malaysia to reach their target market share of the health-fortified drink. With similar products already available in Australia and Sri Lanka, the borrowed experience and expertise from the Nestle employees from these two countries would help tremendously in the initial start-up like product recipe and pricing. With Nestle Singapore, which is under the umbrella of Nestle Malaysia management, producing malt for the region, it is highly advantageous to tap the resource in obtaining a lower cost of raw material to compete with the obvious potential rivalry with Horlicks and Ovaltine. Minerals like vitamins will continue to be imported from European countries where negotiations are being done on a worldwide basis by Nestle SA to enjoy price advantage over solely domestic players. With a sector growth of 11% and Nestle's current growth of a similar 11%, this introduction would hopefully increase Nestle's growth more than the industry's - in other words an increased market share. With the sector value of about RM750 million as at 1999, which is actually the second highest sector in terms of value after Sweetened Condensed Milk among Nestle's range of products, it represents an area of great opportunity for Nestle Malaysia to go into.

5.1.4 THREATS

The major existing competitors in the market are Horlicks, Ovaltine and Vico. Horlicks is manufactured by LFD Manufacturing Sdn Bhd for SmithKline Beecham Sdn Bhd, which is a local subsidiary of SmithKline Beecham Consumer Healthcare, Brentford, United Kingdom, Ovaltine is manufactured by Novartis Nutrition (Thailand) Ltd and imported into Malaysia by importexport agents. Vico is produced locally by Chocolate Products (M) Sdn Bhd. The possibility of trade retaliation of the entry of Nestle's malt-based beverage entrant would be a similar venture by Vico. Horlicks would in turn introduce a chocolate-based beverage to counter-attack Milo's presence. Such scenarios, though theoretically possible, are not realistically viable in the eyes of Nestle's marketing research and development team. Ovaltine, a fully imported chocolate-based beverage, has been a pioneer in the industry for decades. Even the entry of Horlicks years later failed to trigger their machinery to introduce a malt-based beverage then. Only recently did Ovaltine introduce the malt-based beverage to sustain their diminishing market share in the industry. As for Vico, with the parent company selling off its stake of manufacturing and marketing facilities to the Maestro Group of Companies in 2000, it would take a while before it resumes its assault on Milo's market share. The possibility of a similar malt-based foray into the market is very unlikely in the near future. Horlicks is likely to retaliate in the form of price promotion with premiums and packaging variety with extra ingredients such as vitamins. The only possibility that could disrupt the sector as a whole is the entrants of new foreign brands due to the attractive continued profitability and dominance of the major players in this sector. Challenges from domestic companies are not expected due to the process and technological know-how, and the production efficiency required.

5.2 PORTER'S FIVE FORCES

The structure of an industry can be analysed by looking at the regulatory, technological, economic, and commercial forces that shape competition within it.

Another model used to determine the feasibility of introducing a malt-based product is the Michael Porter's Five Forces Model. In scanning the sector, there are five areas or forces that could determine the profitability of a new venture, viz., i) Threat of new entrants; ii) Rivalry among existing firms; iii) Threat of substitutes; iv) Bargaining power of buyers and v) Bargaining power of suppliers.

5.2.1 THREAT OF NEW ENTRANTS

An important determinant of profitability is the number of competitors within an industry who compete for a share of industry profits. This number of competitors depends on who can enter the industry and effectively compete in it. Entry barriers are economic and technological forces that prevent outside firms from entering an industry. These barriers protect competition within the industry from powerful outsiders. If entry barriers are low, threats to entry increase because outsiders can easily come into the industry and increase competition within it. If entry barriers are high, outside competitors cannot enter the industry easily. This protects the industry and its profits. The most important obstacles to entry are economies of scale, product differentiation, switching costs, access to distribution channels, and miscellaneous barriers.

Economies of Scale

The scale of operation of a production unit determines its economic efficiency. As the scale of operation increases, so does its economic efficiency, up to a certain limit. Economic advantages of scale occur because firms can buy raw materials in large quantities at discounts. They can also distribute overhead costs over many units.

In every industry there is a minimum economic scale at which a production unit must operate for it to be efficient and competitive. If this minimum scale of operation is large, it requires a large amount of capital to establish. A large capital requirement acts as a barrier to entry. A larger capital requirement also imposes higher risks, which prevent smaller competitors from entering the industry (Gerry and Kevan, 1993a).

With regard to the health fortified drink market, a new entrant is unlikely due to the reasons outlined above. New entrant in the case of new product variety from existing competitors such as Nestle's malt-based beverage would not fall under the same category, as it is more of a product differentiation, which is discussed herewith.

Product Differentiation

Product differentiation refers to how easy or difficult it is to distinguish products in an industry. Product differentiation, the second major entry barrier, is the extent of a product's uniqueness - in other words, whether or not it is a commodity (Keegan, 1999).

Product differentiation may be based on objective features of the product or on perceived features. Objective features comprise the taste, appearance and nutrition associated with the product. Perceived features include brand image, novelty, status image, and fashion appeal. Industries in which it is easy and inexpensive to differentiate products experience high product and brand proliferation. If creating product differentiation is technologically difficult and expensive, it limits

the entry of new products into the industry. Creating differentiation requires creative product and packaging designs. It also requires heavy investments into advertising and promotion to convince consumers that the product is really different and unique. In this study, the products are generally differentiated by colour, brown for chocolate-based beverage and beige for malt-based beverage. Both have their own standards in terms of tastes, degree of colour and granularity. Other than these, the dominance of a brand depends on its name, reputation and so forth as highlighted above.

iii) Switching Costs

A switching cost is the cost that consumers must incur when they switch from one product to another. It determines how easy or difficult it is for consumers to switch. If switching costs are high, consumers continue to use the same product. They remain loyal to a familiar product and continue to buy it, despite the availability of alternative products. If switching costs are low, customers tend to experiment with new and different products. They try several products and may even substitute products from other industries to fill their needs. Thus, a high switching cost may be created by functional attributes of the product. In this case, the switching cost for consumers is minimal with regard to trying of different beverage brands. Buying Milo, Horlicks or Ovaltine from a grocery store can be almost an impulsive decision. It takes little effort by the consumer to switch from one beverage to another.

iv) Access to Distribution Channels

Easy access to distribution channels lowers barriers to entry into an industry. New entrants can easily distribute their products without having to invest in the creation of a distribution network. Entry is more difficult in industries where existing participants control distribution. As opposed to the oil and gas industry, the distribution channel of grocery products is more or less well established and ubiquitous. Hence, none of the existing players in the HFD sector has a real control over it. The

only advantage these pioneers or first movers have is the shelf positioning that they command.

v) Miscellaneous Barriers

Sometimes technology patents, raw materials monopoly, and regulations can act as important barriers to entry. If a company has patents on a particular product, it can prevent other manufacturers from making that product and entering the industry. This is common in the drugs and pharmaceuticals industry. Patents provide protection from competition for a specific period. In the HFD industry, even though the barriers do not seem apparent, bottle designs, accessibility to raw materials and product recipes are barriers that potential new entrants have to overcome.

5.2.2 RIVALRY AMONG EXISTING FIRMS

Competition and profitability within an industry also depend on the intensity of rivalry among existing competitors. Competitive rivalry consists of dynamic moves and countermoves by competitors to attract buyer and capture a larger share of demand. Every time one firm makes a strategic move, it can expect retaliation from its competitors. This retaliation may take the form of changes in product designs, promotional strategies, packaging, advertising, and prices. Understanding competitors and their activities can provide some benefits. First, an understanding of the current strategy strengths and weaknesses of a competitor can suggest opportunities and threats that will merit a response. Another is insight into future competitor strategies may allow the prediction of emerging threats and opportunities (Aaker, 1998).

Price reduction is a commonly used competitive strategy. However, price wars reduce total industry profits by reducing industry revenues. This can only be corrected if the corresponding reduction in price is offset by an increase in volume of sales which nets a total industry value higher than the situation before the price reduction. Thus, fierce rivalry within an industry can be detrimental to its profitability. Rivalry among competitors depends on several factors. They include number of competitors and their relative power, industry

growth rate, fixed and storage costs, size of capacity augmentation, diversity of competitors, stakes of individual competitors and exit barriers.

i) Number of Competitors and Their Relative Power

The total number of major competitors is an important determinant of the nature of competitive rivalry. More competitors mean more competitive interactions and more rivalry. More competitors also mean smaller average shares of the profit pie for each competitor. The relative power balance among competitors moderates competitive rivalry. If competitors are nearly equal in size and power, they may tend to avoid direct confrontation. They fear upsetting the industry balance. If they are vastly different in size, larger competitors may encroach on the turf of smaller ones to expand their markets. This is a good reason for Nestle Malaysia to embark on the malt-based beverage venture. With a market share of 65% for Milo, Horlicks at 13%, Ovaltine and Vico each at 7%; it is high time for Nestle to use its relative dominant market power to foray into the malt-based beverage which has been synonymous with Horlicks all this while.

ii) Industry Growth Rate

The growth rate of an industry determines the total size of the profit pie. When the industry growth rate is high, the total profits available for sharing among competitors is also high and growing. There is low likelihood of competitors fighting with each other, because each competitor can get sufficient profits to survive. If the industry has matured, its growth rate is low. This limits the size of the total profit pie. For any one firm to do well or improve its performance, it has to take share from other competitors. This leads to retaliation and more rivalry among competitors. Thus, pressures of rivalry are lower in high-growth industries. With a high sector growth of about 11%, the pressures of rivalry in the HFD industry are relatively low compared to sectors that enjoyed less than 8% growth such as the Sweetened Condensed Milk sector, of which Nestle is a major player.

iii) Fixed and Storage Costs

Industries in which fixed costs or storage costs are high experience intense rivalry among competitors. High fixed costs or storage costs can place significant debt burden on firms. They put pressure on firms to liquidate inventories and maintain high-capacity utilisation. In such situations, it is important for firms to turn over their working capital quickly and make the best use of their fixed assets. To reduce storage costs and eliminate old model inventory, auto manufacturers routinely discount products, particularly around the end of the year and during festive seasons. In Nestle Malaysia's case, the operation capacity utilisation of less than 80% at the Petaling Jaya factory provides room for the malt-based variety to be incorporated into the production process which is rather similar, which in turn reduces the need for new fixed cost other than certain spray drying facilities.

iv) Size of Capacity Augmentation

In some industries, including this, production capacity must be added in large sizes. These industries experience more intense competitive rivalry than industries in which capacity can be augmented in small increments. This is so because large-sized new plants are very expensive and require a great commitment of financial resources. To recoup these investments, firms charge higher prices and market their products aggressively to gain higher market share. This leads to more intense rivalry among competitors. Moreover, each round of capacity addition upsets the balance of supply and demand within the industry. Every time a new plant opens, it creates a large additional capacity. Therefore, it is beneficial for one competitor and then another to reduce prices, sell more, and improve capacity utilisation. This leads other competitors to retaliate and the whole industry gets out of balance. (Gerry and Kevan, 1993b)

v) Diversity of Competitors

The more diverse the competitors are in terms of their origins and operating styles, the more diverse their competitive strategies become.

Diverse strategies elicit diverse responses and lead to higher competitive rivalry. Foreign competitors and competitors from other industries increase diversity. They create new competitive moves and new forms of retaliation that increase rivalry. New competitors have different personalities and different resource bases. They can pursue new strategies in an industry, thereby creating an imbalance in the industry. Diversity among competitors also creates higher uncertainty. Existing industry participants do not know the capabilities of new competitors; they do not know what to expect from them. The presence of high uncertainty encourages rivalry. The entry of Vico into the industry in the early 1990s illustrates this point. The company, Chocolate Products, recruited a few key operations staff from Nestle to help start off its venture into this sector. It then entered the attractive HFD market with strong financial and marketing skills that it had mastered in the retail industry. It applied these skills to developing new strategies, new packaging, and new product design ideas for promoting Vico. This upset the balance of forces, market shares, and marketing strategies within the industry. Within a few years, Vico became the third largest brand in the industry. (Nestle Internal Records).

vi) Stakes of Individual Competitors

The willingness of individual competitors to retaliate against others also depends on their stakes within the industry. In today's environment, most large corporations operate in multiple industries. This allows them to diversify their risks. Nevertheless, if a company has unusually large stakes in anyone industry, it will pay more attention to strategic changes within that industry. If there are any threats to its performance within the industry, it is likely to retaliate with much greater vigour. As with the introduction of Vico, Milo was aggressively promoted to counter the market share penetration of the then new member of the industry.

vii) Exit Barriers

Exit barriers refer to costs that prevent or discourage a firm from getting out of an industry. These include high-unrecovered fixed costs, labour commitments. unsold inventories. and interdependence among businesses. Sometimes there are emotional and psychological barriers to exit. If a company has been in an industry for a long time, its management may become committed to staying in it. The company may continue operating in an industry, even when it is not profitable to do so. In industries where exit barriers are high, competitors face higher rivalry. This is because firms unable to exit from the industry must remain in it and do the best they can. Firms ultimately have two choices, to continue in the industry by surviving through aggressive price competition or to sell off the entire operation to a third party, as is the case with Vico in 2000.

5.2.3 THREATS FROM SUBSTITUTE PRODUCTS

The third element that affects industry competition and profitability is the pressure from substitute products. These may come from newcomers or existing competitors. Substitute products erode into the sales and revenues of the industry. They may even eliminate demand for an industry's product. Industries with products that can be easily substituted by products from other industries are always under revenue and profit pressures. For example, we have seen that the invention of ballpoint pens severely cut into the sales of fountain pens. Similarly, mechanical pencils are a substitute for ordinary wooden pencils. More recently, recordable compact disks have started to replace cassettes. In contrast, if an industry's product is unique and serves very unusual functions, it cannot be substituted easily. An example of this is the CAT scanner. This is such a highly specialised instrument that it cannot be easily substituted; it faces no threat of substitution by other products. Besides product substitution, another form of substitution can create pressure on industry profitability and competition. Substitution of new raw materials, components, and subassemblies directly affects the cost of manufacture. For example, carmakers substituted expensive brass and metal alloy components with cheaper but functionally equivalent plastics. This reduced their material

costs and the weight of their cars. Changes in the production costs create wider price variations in the industry and increase competitive rivalry. For the HFD industry, there is no real substitute for cocoa or malt to warrant an impending threat to the existing players in the market. Except for perhaps similar products like Enercal from Wyeth. Even then, this is not a true competitor as its price is almost triple that of Milo and its competitors. Until there is a biotechnology discovery of a competitive substitute for either in terms of taste, appearance and nutrition, the scenario will be restricted to the competitive strategies of new entrants and the existing competitors.

5.2.4 BARGAINING POWER OF BUYERS

Power of buyers refers to their ability to get favourable terms of trade with sellers. Powerful buyers can get attractive price discounts, better credit terms, better product quality and more product support services from the industry. Since these concessions are costly, they have the effect of reducing industry profits. Buyers attempt to get the best value for their money, and by so doing they put downward pressure on industry profitability. The power of buyers depends on several factors: buyer concentration, degree of product differentiation, buyer switching costs, access to backward integration, and the amount of information available to the buyer (Gerry and Kevan, 1993c).

i) Buyer Concentration

Industries that have a high concentration of buyers are too dependent on these buyers. Buyers in these industries can be very powerful and can extract better products, prices, and better terms of trade from the industry. In contrast, in industries that have a large number of buyers, each buyer tends to be small. Small individual buyer cannot exert much pressure on the industry. As for the HFD industry, buyers are generally categorised into the big buyers, and the small buyers who obtain the products through appointed dealers of the industry players. Examples of big buyers are Carrefour, Makro and Giant hypermarkets, which wield enormous power over suppliers including Nestle Malaysia. Sometimes their in-house promotions of the Nestle's products are even cheaper than those in Nestle's staff shop where staff can purchase

Nestle products at an average of 30% below normal retail price! The small buyers are the sundry stores and mini-markets who compensate for their lack of bulk bargaining power by being more conveniently accessible to the relevant neighbourhood.

ii) Degree of Product Differentiation

High degree of product differentiation has the effect of limiting buyer power. In industries with highly differentiated products, most products have unique features. To obtain certain product features, buyers may have no choice but to buy from a specific manufacturer. However, this is not the case in the HFD industry. The degree of differentiation is low (if compared within the chocolate-based or malt-based sector alone) and competitors rely more on promotional and price strategies to retain and attract consumers.

iii) Buyer Switching Costs

Another factor that determines the bargaining power of buyers is switching costs. If switching costs are low, dissatisfied buyers can easily move from one supplier to another. Their flexibility in choosing among alternative buyers is a source of power. It gives them an advantage in negotiating better business terms from suppliers. On the other hand, if switching costs are high, buyers are locked into specific suppliers. They cannot insist on better terms of trade. Thus, higher switching costs limit the bargaining power of buyers. As indicated earlier, buyers' switching costs are low in the HFD industry. Thus, the products available need to be competitive in order to maintain the loyalty of the consumers.

iv) Access to Backward Integration

Backward integration by a company is the strategy of manufacturing raw materials or subassemblies that go into its products. Consider automobile manufacturers. They normally buy tyres, batteries, shock absorbers, and so forth from ancillary suppliers. Sometimes, it is feasible, however, for automakers to backward integrate by

manufacturing these supplies. If buyers of an industry can easily backward integrate to manufacture products of that industry, they gain bargaining power over the industry. The threat of backward integration is real only with powerful buyers - those that have the financial and technological capability to manufacture their supplies. This threat is not foreseeable in the HFD industry as the major buyers are purely focused in the retail industry.

v) Amount of Information Available to the Buyer

The power of buyers critically depends on the amount of information they have about product quality, cost structure, and performance characteristics. The buyer can use this information to negotiate better terms of trade with suppliers. The more information the buyer has, the more likely the buyer is to extract better terms of trade from the industry. Better terms of trade for buyers means loss of revenues and profits for the industry. Which is why product cost structure and recipes are privy to the manufacturers themselves so as to protect their profit margin from competitors and buyers alike.

5.2.5 BARGAINING POWER OF SUPPLIERS

Suppliers of raw materials influence industry profitability and competition by affecting the cost of production. If suppliers are powerful, they can obtain high prices for raw materials. They may also negotiate favourable terms of trade. They can decide product features, packaging, payment schedule, credit terms, insurance, and delivery cost and schedules. The bargaining power of suppliers depends on the same variables that shape the bargaining power of buyers. These include concentration of suppliers, importance of industry to suppliers, threat of forward integration, and access to other sources of supply.

i) Concentration of Suppliers

Just as the number of buyers was a determinant of buyer power, the number of suppliers is a crucial determinant of supplier power. If an industry has many suppliers, it has the option of buying from many different sources. Suppliers try to meet industry requirements, but they lack power because they are substitutable. As for Nestle Malaysia, since it is the dominant player in many sectors of the processed food industry such as instant coffee, cereals, and health fortified drink, these products share some common packaging materials like tinplate, carton and layer pad, to name a few. This bulk order of materials due to its huge volume gives Nestle the real bargaining power against suppliers as compared to its rivals in the food industry. Except for controlled items like sugar, Nestle enjoys an advantageous bargaining power over some of its competitors.

ii) Importance of Industry to Suppliers

Another factor that determines the bargaining power of suppliers is how important the industry is to them as a customer. If the industry consumes a large part of the suppliers' output, it would be considered important. The suppliers would be willing to meet the industry's demands for better terms of trade. In fact, Milo is such an important product for Kian Joo Can Manufacturing that they bought a specially designed machine just to cater for Milo 1.5kg brandpack of Nestle. This is a real example of the dominant influence of Nestle on the supplier and the reflection of the supplier's own belief of the staying power of Milo, which would lead to a win-win benefit for both parties from such an action. Strategic alliance - a tool for achieving the strategic collaboration among partners involving the commitment of assets and management resources with the objective of enhancing the partners' competitive positions (Webster, 1994).

Similarly, the joint venture between Milkpak of Pakistan and Nestle created a win-win situation for both. Milkpak gained expert training for its staff and increased sales of its subsidiaries while Nestle benefited from Milkpak's extensive milk collection infrastructure and eliminated a future potential competitor. (Quelch et al. 1996).

iii) Threat of Forward Integration

Forward integration refers to a company entering businesses that bring its finished goods closer to customers. If industry suppliers can enter the industry through forward integration, they increase the intensity of competition. New entrants mean more competing firms, each sharing a smaller part of industry profits. The entry of suppliers into an industry jeopardises the competitive position of current industry participants. The new entrant has better control over supplies. Credible threats of forward integration from suppliers enhance their bargaining power. Forward integration is a threat only if suppliers have enough financial. marketing, and technological resources to enter the industry. In the case of HFD sector, there is no imminent threat from the current suppliers, as none of them seem to have all the above requirements to muster a threat to the existing players. Furthermore, with such a dominant brand like Milo, many don't fancy their chances of success in the sector as proven by the lacklustre performance of Vico after its dramatic entry into the market not too long ago.

iv) Access to Other Sources of Supply

Access to other sources of supply by buyers reduces the bargaining power of suppliers. Sometimes an industry can substitute products from current suppliers with products from other industries; or an industry may be able to buy from foreign suppliers. Suppliers are thus pressured to give the industry good terms of trade. For example, bottlers of soya-milk drink can buy containers made of glass, plastic, metal, tetra-paper, or composite materials. Each of these supply industries knows it is substitutable and therefore vulnerable. The same situation also applies to the HFD industry.

5.3 COST RATIONALISATION

The second objective concerns the cost reduction measures to be undertaken by each factory in its production expenses in line with Nestle's transnational strategy in Malaysia. It covers both reductions in manufacturing expenses and improvement in productivity and efficiency.

5.3.1 FACTORY MANUFACTURING EXPENSES

Based on Table 5.2, the analysis focuses on the factories detailed expenses with emphasis on the production expenses and areas with realistic reduction in cost without undermining the quality of the end products to the consumers.

Overtime Expenses

Except for Kuching factory, all the other factories showed a percentage of almost ten and above of the total manufacturing expenses. The right target to be attained should be set at 7% or a quarter of the salary and wages amount, whichever is lower. Overtime in Batu Tiga and Raja Muda factories are pretty alarming, as they are about 50% of the salary and wages amount.

ii) Production Line Expenses

Except for Shah Alam and Batu Tiga factories, the other factories managed to keep the percentage to 1%. Targets should be given to these two factories to achieve the same level of efficiency as the others.

iii) Glue and Other Packing Materials

There could be a huge wastage involved here as both Petaling Jaya and Raja Muda factories recorded the half a million mark whereas the second and third largest factories each incurred less than RM200,000. It could be due to a number of reasons, but these are ancillary items and their relative-costs should be comparable.

iv) Maintenance & Repairs

The last but certainly not least area of expense where huge savings could be obtained is in the area of Maintenance and Repairs. Though it is rather essential to ensure no machine breakdown and so forth could disrupt the continuity of the production process, there is certainly room for savings as acknowledged by the industrial performance manager and engineers alike. A commitment of 3-5% reduction against the total cost would be a fair target to achieve.

TABLE 5.2				FAC	TORY MA		FACTORY MANUFACTURING EXPENSES 1999	EX	ENSES 1	666			
DESCRIPTION	RM	%	SA	%	BT	%	PJ	%	CHE	%	KCH	Г	TOTAL
Salaries and Wages	4,026,852	22	6,748,819	27	7,106,380	28	9,848,858	30	3,425,385	35	808,174	22	31,964,610
Shift allowance		0		0		0		0		0	90,364	2	90,364
Bonus	555,842	က	922,489	4	1,027,576	4		4	476,456	2	91,094	7	4,296,554
Overtime	1,905,113	10	2,221,642	0	3,517,686	14	4	13	1,157,933	12	121,133	က	13,091,857
Ex Gratia	51,760	0	83,569	0	68,864	0	196,762	-	45,217	0	15,736	0	461,910
Housing loan int. Subsidy	98,503	-	93,275	0	64,717	0	178,617	-	62,156	-	18,474	-	515,744
EPF employer contribution	583,798,	б	937,462	4	1,028,616	4	1,359,570	4	535,770	9	127,236	ю	4,572,473
SOCSO employer contribution	69,035	0	93,364	0	141,297	-	141,697	0	59,020	-	13,643	0	518,058
Gratuity	4,369	0	251,507	-	101,263	0	399,909	-	4,085	0		0	761,136
Performance Incentive	12,720	0		0	20,184	0		0	25,050	0	688	0	58,642
Pension fund	168,246	-	265,338	-	246,252	-	330,428	-	114,535	-	30,466	-	1,155,270
Medical expenses	132,605	-	170,330	-	177,897	-	228,999	-	44,103	0	33,791	-	787,728
Human resource	44,951	0	65,038	0	65,004	0	75,108	0	8,486	0	8,405	0	266,993
Hospitalizaiton		0	12,839	0	75,553	0	119,158	0		0		0	207,551
Refreshment for staff	2,799	0	5,251	0	3,084	0	8,920	0	6,221	0	964	0	27,239
Uniforms	51,674	0	145,050	-	32,411	0	97,214	0	84,563	-	45,625	-	456,539
Sports and recreation		0		0		0		0		0	6,020	0	6,020
Staff dinner and service award	55,676	0	116,810	0	90,515	0	255,110	-	28,271	0	11,926	0	558,310
Baby feeding scheme	33,253	0	30,751	0	38,096	0	28,393	0	16,257	0	7,973	0	154,724
Transport subsidies	32,118	0	46,697	0	101,572	0	40,850	0	5,247	0	69,425	2	295,910
Meal allowance	829'66	-	92,806	0	268,794	-	180,846	-	85,569	-	120	0	727,816
Canteen expenses	111,994	-	183,036	_	239,830	_	212,469	-	134,876	-	35,231	-	917,440
Workmen compensation		0	903	0		0	1,183	0	4,701	0		0	6,787
Multiplan Scheme	5,360	0	5,634	0	6,158	0	27,837	0	9,286	0	1,250	0	55,525
Rent subsidy	3,375	0		0		0	30,393	0		0	8,580	0	42,348
Outside labour	717,467	4	1,068,074	4	589,386	2		2	698,198	7		0	3,706,935
Sundry workshop	33,072	0	112,440	0	30,561	0	97,648	0	39,302	0	50,675	-	363,699
Sundry production material		0		0		0	6,233	0	177,582	2		0	183,817
Warehouse expenses	136,235	-	38,450	0	88,281	0	56,958	0	69,583	-	15,067	0	404,576

25,817	18,917	1,755,390	1,896		74,915	214,086	1,426,505	643,550	334,022	37,678	91,195	(22,679)	180,381	7,589	19,619	80,404	332,444	1,642,567	1,565,331	407,860	41,954	19,538,003	7,498,434	13,583,352	444,806	100,274	383,295	56,655	67,353	122,496
0	0	-	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	ю	0	0	0	25	0	9	2	0	0	0	0	0
		23,722					35,834	11,010	3,680				3,722				147	118,386				927,220	313,300	233,484	58,282	2,932	12,705	2,948	156	8,479
0	0	က	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	24	9	34	-	0	-	0	0	0
25,817	4,868	328,802	1,896			47,543		27,947	37,461		43,929		29,210	2,446		14,127	3,835	193,241	183,412			2,354,710	595,041	3,342,534	109,832	9,162	80,509	21,975	19,765	24,418
0	0	7	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	7	-	0	0	13	7	o	0	0	0	0	0	0
		737,854					392,536	90,505	56,574	4,952		(22,679)	25,971	2,130		28,452		518,884	184,178			4,428,416	2,250,183	2,937,314	65,329	68,294	124,067	3,373	2,683	16,171
0	0	0	0	0	0	0	7	0	-	0	0	0	0	0	0	0	0	-	0	0	0	15	0	9	0	0	0	0	0	0
		117,600			_	20,000	375,608	39,648	142,911	1,417	47.265		47,640	3,013	19,619			187,113				3,787,230		1,512,325	57,713	4,859	59,514	17,059	2,581	13,506
0	8	-	0	0	0	-	2	2	0	0	0	0	0	0	0	0	0	0	-	2	0	19	15	12	0	0	0	0	0	0
	760,012	146,582	-			146.542	418.764	456,952	16,174	20,956			60.111			37,825	351	112,299	299,888	407,858	41,954	4,918,652	3,908,205	3,122,638	98,329	3,277	67,057	5,455	20,659	24,660
0	4	7	0	0	0	0	, -	0	0	0	0	0	0	0	0	0	2	m	2	0	0	17	2	13	0	0	0	0	0	0
	(745.962)	400.821			74.915		203.758	17.485	77,220	10,353			13.726				328.109	512,636	897,844			3,121,686	431,674	2,434,982	55,319	11,750	39,441	5,845	20.909	35,261
Waste disposal	Refriceration share	Water	Write off materials	Public warehouse rental	Haulace	Plant cleaning chemical	Production line expenses	ab Maintenance materials	Analytical fees	Production trials	Technical assistance	Rework expenses	Pest Control	Sample for lab analysis	Development trials	Chemical for boiler	Diesel oil for generator set	Glue & Other Packing material	Gases/Steam	Tetra Pak Rental	Stretch Film	Maintenance & Repair	Fuel oil	Electricity	Telephone telex & postage	Servicing office machine	Stationery & photocopy	Office sundries	Cost of engaging staff	Factory vehicle expenses

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0 6,102 0
139,154 1 30,325 0
86,259 0 2,959 0
0
1,600 0 0
269,690 1 306,443 1
12,664 0 2,517 0
0 792,267 3
158,218 1 99,134 0
-
0 6,505
56,372 1 179,314
3,800 0 2,843
74,619 0 42,350
0
08,747 0
0 9,415
317 0
0 4,983
0
0 41,299
0
0 150,913
1- (89)
20) 0 36,324
(365,453) -1
120,933) 0 55,176
c

Transfer improvement labor		0		0		0		0		0		0		
Labor/expenses outside cost		0		0		0		0		0		0		
Union negotiation expenses	102	0		0		0		0	6,710	0		0	6,812	
Transfer M&R labor		0	(773,946)	ć		0		0		0		0	(773,949)	
Electricity fixed cost	84,552	0	(93,864)	0		0		0		0		0	(9,312)	
Floor rental to NAM		0		0	(118,566)	0		0		0		0	(118,566)	
Laboratory analysis		0	(385,974)	-2		0		0		0		0	(385,976)	
Centralized workshop expenses	73,140	0	(170,736)	7	72,360	0		0		0		0	(25,236)	
Centralized laundry expenses	30,928	0	(94,620)	0	58,848	0		0		0		0	(4,844)	
Share of packing exp.		0		0	296,011	-		0		0		0	296,012	
Share of expenses (NAM)		0		0	(494,111)	7		0	(5,796,961)	9		0	(6,291,134)	
Proceeds M&R material	(249,372)	7	(60,652)	0		0		0	(212,550)	ņ		0	(522,578)	
Steam Energy	218,700	-	(2,468,539)	-10	1,579,318	9		0		0		0	(670,523)	
Total	18,363,799		25,238,589		24,990,697		33,044,443		9,706,531		3,658,635		115,003,194	

Source: Nestle Internal Records, 1999.

5.3.2 IMPROVEMENT IN PRODUCTIVITY AND EFFICIENCY

Three teams of three members each were formed in 1998 as part of the launching of KESAN (Towards International Competitiveness) in factory operations. This was an improvement project together with the international Nestec Productivity Team from Vevey, Switzerland. The project duration took about five months, covering the Raja Muda and Shah Alam factories, with constant monitoring and revision of the recommendations where due. Among the notable results were:

 Improvement in Line Efficiencies Achieved at Sachet Filling Lines of the Beverage Mixes Plant

Significant increases in Line Efficiencies were made when the Raja Muda factory utilised the continuous improvement tool PDCA (Plan-Do-Control-Act) and revised nominal speeds. Taking a closer look at work patterns made it possible to run through breaks and increase the line-performance. The Raja Muda factory also optimised the sequence of products in the production plan in order to reduce lost time and changeover losses.

ii) Utilisation of Slip-sheets to Reduce Pallet Costs

A plan to use slip-sheets instead of pallets for the transportation of octabins between Australia and Malaysia would lead to a reduction in pallet-costs and increase volume transported. By implementing a manual warehouse management system, revising the stock policy and working closely with can-suppliers, Shah Alam factory can achieve holding costs and avoid third party warehouse storage rental and demurrage charges for containers. By importing Octabins from Australia on slip-sheets, the factory would avoid the cost of 14,250 pallets a year (Berita Nestle, 3/98).

iii) Netweight Reduction on Lactogen 2

The zone chart that was used for the Netweight control showed positive results. The overfill in Lactogen 2 (Milkpowder for babies 1-3 years old) dropped by 50% compared to previous unchanged practice. In order to ensure a sustainable decrease of netweight, the whole milkpowder plant staff underwent the Basic Netweight Principles Training. Engineering personnel established a checklist with all critical points on the machine that influence netweight to ensure the filling machines were in good condition.

iv) Optimisation of Pallet Utilisation

By adding one additional layer to the 2kg cans from 8 to 9, there would be 674 pallets less to be moved annually, bringing a yearly savings of RM33,700. This is being done after taking into account the safety aspect as well, where the new pattern did not pose additional danger despite the increased height.