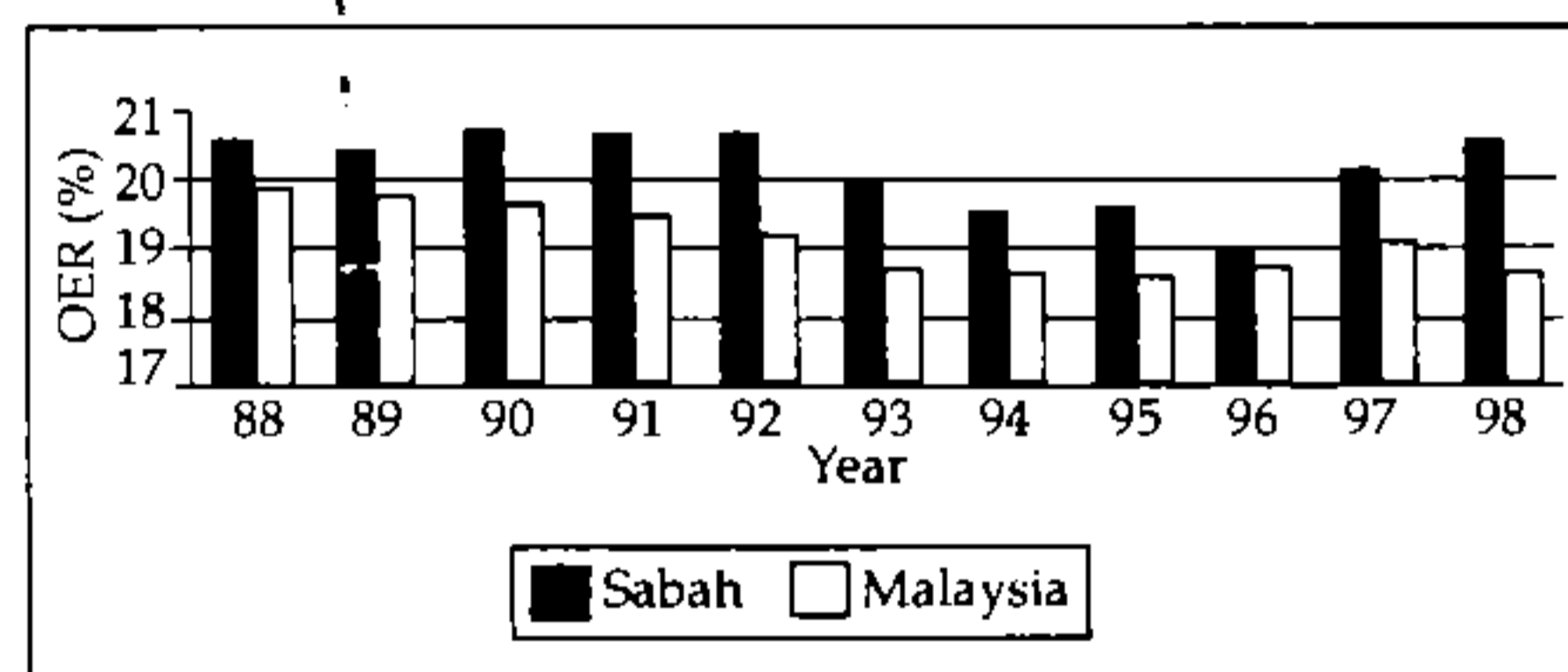


OIL AND KERNEL EXTRACTION RATE - A MANAGEMENT PERSPECTIVE

Oil extraction rate (OER) and kernel extraction rate (KER) are two indicators of efficiency which can indirectly influence the profitability of any plantation enterprise. Being an integrated oil palm venture, this is of prime importance, because the final arbiter of commercial success is the oil yield per ha and not just FFB yield per ha alone.

Over the last 10 years, the scenario of extraction rates in Malaysia has experienced a continuous decline and only experienced some improvement in 1996 and 1997 (Figure 1).



Source: Annual OER Performance by state 1984-1997 (%).

[Http://161/142.157.2/home2.home/p.77.htm](http://161/142.157.2/home2.home/p.77.htm).

Figure 1. National and Sabah state's Oil Extraction Rates (1988 - 1998).

This success could be attributed to the nationwide 'Campaign to Increase Oil Extraction Rates' undertaken by PORLA and PORIM, working closely with the industry in addressing the issue.

In Sabah, a similar scenario was observed and some improvement were realized in 1997. The flood at end of 1995 and early 1996 has caused a sharp decline of 0.61% to 18.92% of OER in 1996 for Sabah. Moreover, the poor fruit set experienced in mid 1995 and 1996 has also caused some decline in extraction rates for the year.

1.1 Oil Extraction Rates

The first palm oil mill in our group was commissioned in 1991. Over the years, our group has expanded to three oil mills with a processing capacity of 150t/hr.

Over the last five years, we have experienced an increasing trend in extraction rates (Table 1). The extraction rates has never dropped below the national or the state average (Figure 2).

1.2 Objective

Factor affecting extraction rates are numerous and can be categorized as controllable and uncontrollable. This paper aims to discuss only the controllable factors which cover milling and agricultural practices.

TABLE 1. THROUGHPUT AND EXTRACTION PERFORMANCE OF THE GROUP'S OIL MILLS PERIOD: 1994 - 1998

Parameter	Capacity	1994	1995	1996	1997	Jul 1998
Palm Oil Mill A	60 t/hr					
Throughput		262 247	356 786	290 669	247 335	123 523
OER (%)		19.60	19.90	19.56	20.95	20.20
KER (%)		4.30	4.60	4.41	4.97	4.50
Palm Oil Mill B	60 t/hr					
Throughput			58 581	196 137	218 865	102 139
OER (%)			20.36	20.50	21.77	21.69
KER (%)			4.44	4.35	4.67	4.27
Palm Oil Mill C	30 t/hr					
Throughput					49 256	89 752
OER (%)					22.54	21.86
KER (%)					4.86	4.61
Combined	150 t/hr					
Throughput		262 427	415 367	486 806	515 456	315 414
OER (%)		19.60	19.96	19.94	21.45	21.15
KER (%)		4.30	4.60	4.40	4.99	4.53

Capacity as at July 1998.

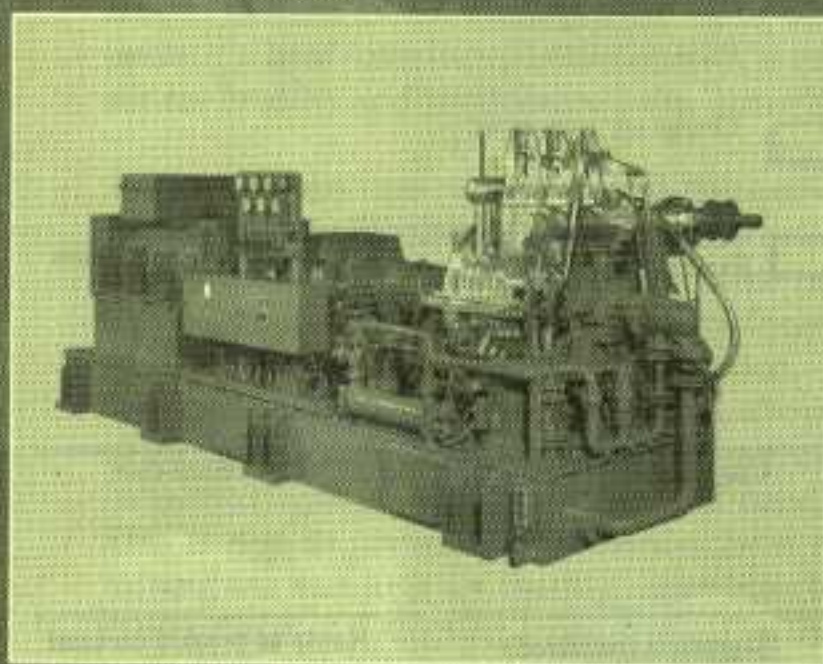
(cont. on page 27)

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