

# OIL PALM – COPING WITH SUSTAINABILITY BY DIVERSIFICATION OR INTENSIFICATION?

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Company name/sector	Oil palm			Other areas*			Aggregate		
	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue	Revenue
Sime Darby Plantations	15,115	15,115	-	15,115	15,115	0	15,115	15,115	0
Indofood Agri Resources	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Tebu Tenda	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
Pertamina	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Tugu	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Kani	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Makmur	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Daya	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Gema	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti II	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti III	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti IV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti V	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti VI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti VII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti VIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti IX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti X	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XIV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XVI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XVII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XVIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XIX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXIV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXVI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXVII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXVIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXIX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXIV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXVI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXVII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXVIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XXXIX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XL	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLIV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLV	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLVI	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLVII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLVIII	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti XLIX	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0
PT Bumi Sakti L	14,312	14,312	0	14,312	14,312	0	14,312	14,312	0

## BACKGROUND & OBJECTIVE

Oil palm's extensive expansion in Indonesia and Malaysia has been heavily criticized for negative environmental and social impacts, despite its cost-efficiency and relative high yield. Large corporate growers have acceded to NGO pressures, as have multi-national consumer brands. NGOs combat oil palm intensification. How are key plantations coping with the shift to sustainability?

## METHODOLOGY

The pace and prospects for oil palm acreage growth are increasingly constrained for the largest plantations. We review recent company annual reports of the largest public-listed oil palm plantations, for land bank data trends and information on intensification efforts, to study their alternative growth strategies.

## RESULTS - LAND BANKS GROW BUT INTENSIFICATION LAGS

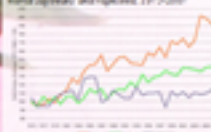
The top 15 selected companies have aggregate land banks ranging from Sime Darby's 900,000 to Hap Seng's 40,000 ha. The average size is about 300,000 ha, with reserves or unplanted areas at some 70% of current planted area, while smallholder and joint venture development plus other crops represent 30% of the same.

To expand, the large plantations:

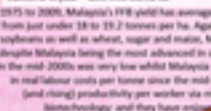
- a) diversify to other crops in familiar territory e.g. Indofood Agri and New Britain Palm Oil have interests in other crops and Wilmar is planning a major expansion into sugar in Indonesian Papua;
- b) enter into joint ventures to expand to far-flung regions, e.g. Wilmar's moves into West Africa; and
- c) accept more smallholder development, e.g. Indonesia land concessions require plasma or smallholder development, and Sime Darby's recent land deals on Sarawak native customary right land offer 30% to landholders and a 10% stake to a state development agency (see table).

In contrast, intensification efforts of the large plantations have been limited. Very few offer data on research and development (R&D) spending, and their usage of high-yielding elite material. Most have in-house R&D units. KL Kepong and Indofood Agri reported spending about 0.4% of revenue on R&D, while Genting Plantations stands out with some RM46 million or 6% spent recently. United Plantations, a standard bearer, reports fresh fruit bunch or FFB (of oil palm) yield of 23.9 tonnes per ha; some 8,500 ha or 24% of its total Malaysia areas is planted with higher yielding elite and clonal seedlings at end 2010. Sectoral data shows that the average Malaysian planter has had limited success in intensification efforts. Poor yield and productivity growth has plagued oil palm for decades (see graphs).

Global per-hectare Malaysian FFB yield (of oil palm) 1973-2007



Malaysia oil palm yield per hectare (oil palm) 2005-2007



2005 to 2007, Malaysia's FFB yield has averaged 18.7 tonnes per hectare, rising only 7% in 34 years, from just under 18 to 20.2 tonnes per ha. Against the average world yield growth for oil palm and soybean as well as wheat, sugar and maize, Malaysian oil palm records the slowest growth overall, despite Malaysia being the most advanced in oil palm research. Palm of output per full time worker in the mid 2000s was very low whilst Malaysia also suffered a steady increase (nearly 2.3% per year) in real labour costs per tonne since the mid 1980s. In contrast, the annual oil yields have higher (and rising) productivity per worker via mechanisation, economies of scale and the use of biotechnology; and they have achieved 1% to 4% annual cost reductions per year.

## CONCLUSION

As land runs out in Malaysia and Indonesia and NGO campaigns take effect, the pace of oil palm land expansion by the large plantations has decelerated, and they have started to diversify by geography and by crop. In contrast, efforts at intensification have lagged, and there is need of big investments in improved varieties and in robotics for mechanisation.

## REFERENCES:

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