

# C07 – How Does Oil Palm Affect the Economy of Jambi Province?



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## ABSTRACT

The economy of Jambi Province has developed considerably, where its output grew from Rp 18.09 trillion in 2000 to Rp 103.36 trillion in 2010. Oil palm plantation and CPO industry played important role on the economy of Jambi. By 2010, output of plantation comprised 2.63 percent of the province's output, and that of the industry constituted 4.59 percent of the province's output. Development of oil plantation and CPO industry has positively affected other sectors of the Jambi's economy as reflected by the multipliers. Based on the Input-Output analysis, in 2010 the output multipliers for the plantation and the industry were 1.430 and 1.552 respectively, the income multipliers were 1.247 and 2.868 respectively, and the employment multipliers were 1.258 and 3.698 respectively. These multipliers were lower than those in 2000 except for output multiplier of oil palm plantation, where the figures of output multipliers were 1.422 and 1.568, income multipliers were 1.266 and 3.012, and employment multipliers were 1.333 and 4.098 respectively for the plantation and the industry. The higher multipliers for the industry in comparison with those for the plantation suggest that government should prioritize development of the industry especially downstream industries rather than further expansion of oil palm plantation.

## Background

In the last decade, the area under tropical rain forests had declined drastically in Indonesia. Conversion of rainforest for large-scale oil palm plantations is one of major cause of deforestation. According to Fitzherbert *et al.* (2008), principally, oil palm expansion contributed to deforestation in both direct and indirect ways, resulting in negative externalities. But economically, changes in the land-use can have positive impacts both on the province and the surrounding community especially for households.

## Objectives

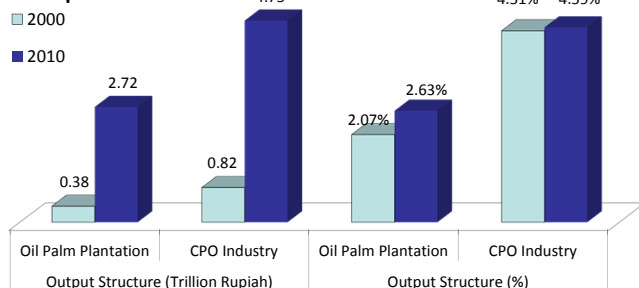
To assess the contribution of oil palm plantation and oil palm industry to the economy of Jambi Province.

## Method

- Input-Output (I-O) Table of Jambi Province year 2000 and 2010 (updated), 70x70 sector.
- The I-O analyses, that represents the interrelationships among several sectors in a complex economy system and the relationship between sectors within a region.

## Preliminary Results

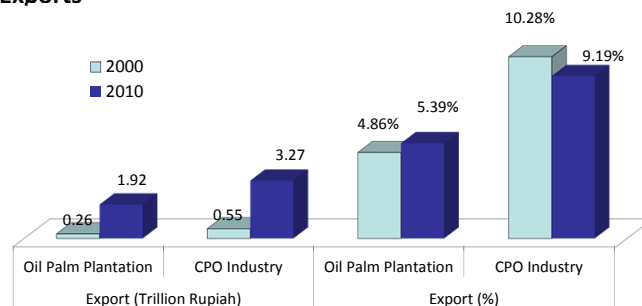
### 1. Output Structure



Rank: Based on contribution to total output  
Oil palm plantation: from 17 (2000) to 14 (2010);  
CPO industry: from 6 (2000) to 5 (2010) among all sectors.



### 2. Exports



Rank: Based on contribution to total exports

Oil palm plantation rank: from 7 (2000) to 8 (2010);

CPO industry rank: from 4 (2000) to 3 (2010) among all sectors.

### 3. Multipliers

Indicator	Oil Palm Plantation		CPO Industry	
	2000	2010 (Rank)	2000	2010 (Rank)
Output Multiplier	1.422	1.430 (15)	1.568	1.551 (2)
Income Multiplier	1.266	1.247 (31)	3.012	2.868 (3)
Employment Multiplier	1.333	1.258 (34)	4.098	3.698 (9)

- The lower multipliers (income and employment) on both sectors might be caused by some factors particularly the industry condition which is approaching the saturation level, as well as the improvement on the productivity.

## Conclusion

- Linkage and multiplier indicators for both years 2000 and 2010 suggested that the CPO industry had a higher role on the Jambi Province regional economy than the oil palm plantation did.
- The higher multipliers for the industry than for the plantation suggest that government should prioritize development of the industry especially downstream industries rather than further expansion of oil palm plantation.

Reference: Fitzherbert, E. B., Struwig, M. J., Morel, A., Danielsen, F., Brühl, C. A., Donald, P. F., & Phalan, B. (2008). How will oil palm expansion affect biodiversity?. *Trends in ecology & evolution*, 23(10), 538-545.