Assessing the impact of RSPO certification on forest cover and orangutans; the Borneo perspective

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A Renewed Commitment to Achieving Market Transformation

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Comparing 3 studies on RSPO certification, orangutans and forest loss

An impact analysis of RSPO certification on Borneo forest cover and orangutan populations

A Borneo Futures report for the Orangutan Land Trust and Wilmar International

Erik Meijaard[1,2], Courtney Morgans[2], Husnayaen[3], Nicola K. Abram[1,4], and Marc Ancrenaz[1,5]

Nr. 1. "The Meijaard study". 2017

Evaluating the effectiveness of palm oil certification in delivering multiple sustainability objectives

Courtney L Morgans[1,2,5], Erik Meijaard[1,3], Truly Santika[1,2], Elizabeth Law[1,2], Sugeng Budiharta[4], Marc Ancrenaz[3] and Kerrie A Wilson[1,2]

Nr. 2. "The Morgans study". 2018

Effect of oil palm sustainability certification on deforestation and fire in Indonesia

Kimberly M. Carlson, Robert Heilmayr, Holly K. Gibbs, Praveen Noojipady, David N. Burns, Douglas C. Morton, Nathalie F. Walker, Gary D. Paoli, and Claire Kremen

Nr. 3. "The Carlson study". 2018

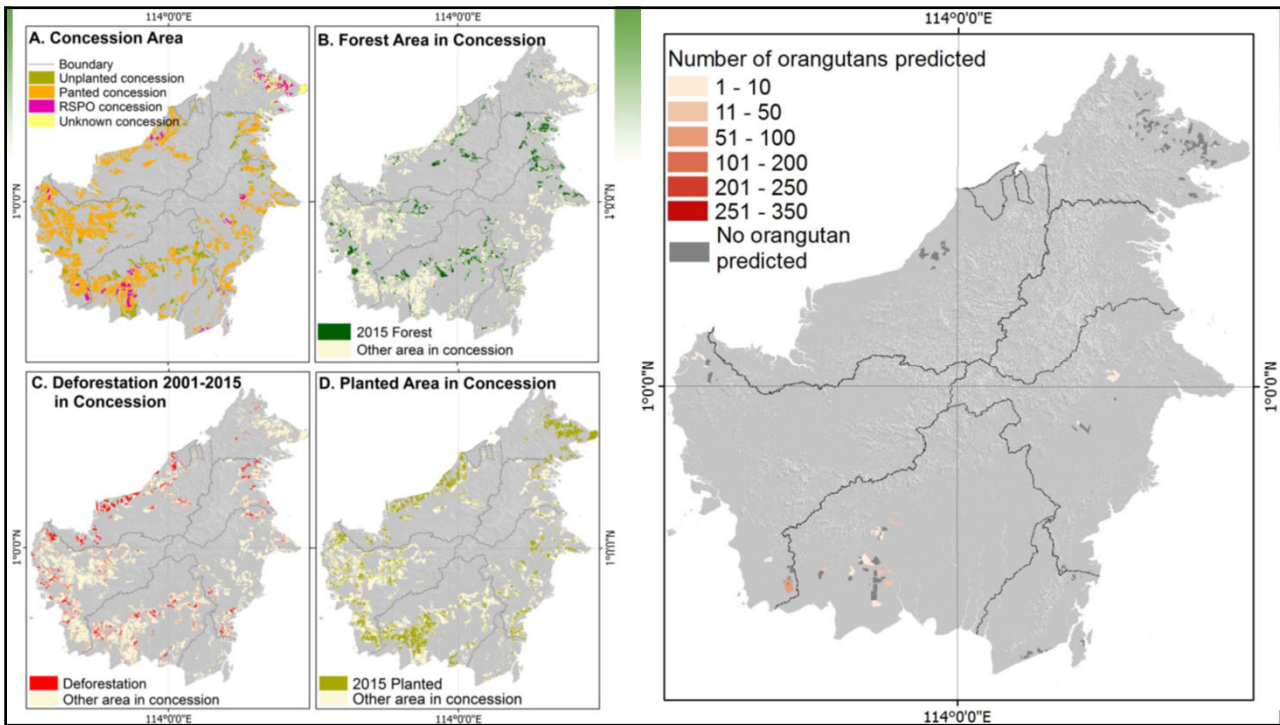# Main reported findings caused some confusion

- Meijaard report said "**RSPO marginally better than non-RSPO**"

- Morgans report said "**RSPO the same as non-RSPO**"

- Carlson report said "**RSPO certified palm oil was associated with reduced deforestation**"

So why the different findings?

(1) Key conclusions by Meijaard

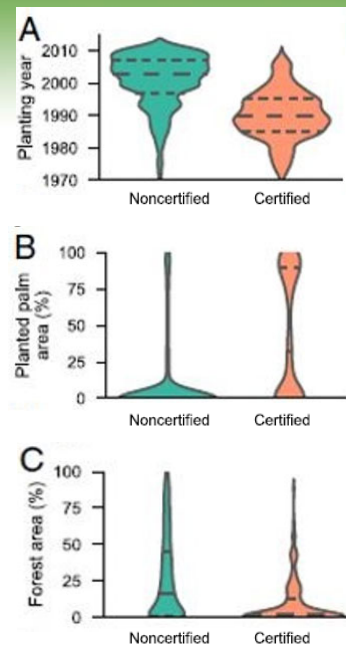|	RSPO-certified	Non-RSPO certified
Total estate area	815,592 ha	10,152,756 ha
Total forest loss	Declined (↓) from 13,417 ha/y until 2007 to 1,839 ha/y in 2015	No decline – averaging between 131,000 ha/y and 220,000 ha/y
Forest cover per estate	4.5% in 2015	10.9% in 2015
Planted area per estate	82%	41%
Orangutan populations	275 orangutans in 32 estates (loss 2.2% / y)	9,300 orangutans (loss 2.1% / y)

(2) Key conclusions by Morgans

- Orangutan populations declined (↓) in both certified and non-certified concessions between 2009–2014.

		1999-2004	2005-2014
		Pre treatment mean (SE)	Post treatment mean (SE)
Orangutan	RSPO certified	18 (6.4)	12.3 (4.6)
(Number of individuals)	Non-certified	22.6 (7.3)	18.1 (5.1)
Fire	RSPO certified	2	6.69 (1.81)
(Number of incidents)	Non-certified	2	6.38 (1.64)
Health facilities	RSPO certified	1.14 (0.11)	0.897 (0.09)
(Number of facilities)	Non-certified	1.41 (0.09)	0.807 (0.07)
Reduced No. poverty letters	RSPO certified	13.3 (1.46)	48.1 (9.50)
(Number of households)	Non-certified	17.5 (4.09)	68.8 (9.65)
Yield	RSPO certified	1 479 000 (736 965)	7 922 984 (2 229 848)
(Fresh fruit bunch mT)	Non-certified	403 036 (25 621)	789 900 (60 099)
Profit	RSPO certified	0.912 (0.66)	2.99 (1.23)
(Share value SGD)	Non-certified	1.15 (0.60)	2.10 (1.27)

Result summary of matched pre and post treatment means of metrics and standard errors

(3) Key conclusions by Carlson

- The mean initial planting date for certified plantations in Indonesia was 1993.

- Only 8.3% of certified plantations initiated planting from 2005 to 2008,

- Certified plantations began the study period with less forest and more oil palm than noncertified plantations

- Kalimantan plantations had a lower (↓) aggregate deforestation rate (4.1% y−1) than Sumatra plantations (7.5%y−1)

- Deforestation and fires continued after certification, but certification reduced (↓) deforestation rates by 33%, from a counterfactual mean of 9.8 to 6.6% y−1

- 21 ± 2.8 km2 of "avoided" deforestation through 2015

Why the differences between studies?

	Meijaard	Morgans	Carlson
Location	Borneo (Indonesia & Malaysia)	Kalimantan	Kalimantan & Sumatra
Sampling methodology	Certified vs. non-certified	Counterfactual data analysis Propensity matching > comparing like to like	Counterfactual analysis
Parameters	Deforestation rates Orangutan population trends	Orangutan populations	Deforestation rates
Sample size	2,771 palm oil estates (small and large), of which 220 are certified	515 industrial-scale concessions, of which 91 are certified	2,331 estates, of which 168 are certified and 220 are RSPO member

Conclusion

- Different analyses will result in different outcomes

- RSPO certification is not perfect (e.g., orangutan loss and deforestation continues)

- But RSPO certification seems to offer more environmental and economic benefits that non-certified plantation management

- Further improvement of the P&C may be needed, but what especially needs to be improved is their implementation on the ground and the auditing of this implementation

Thank You