

# Does certifying oil palm help alleviate poverty?

## Lessons from RSPO in Indonesia

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University of Kent

 @mattstruebig



# The amazing team

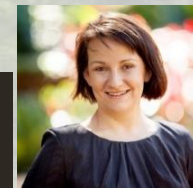


**Truly Santika: DICE, UQ & Borneo Futures**



**Erik Meijaard: Borneo Futures**



**Sugeng Budiharta: LIPI Indonesia**



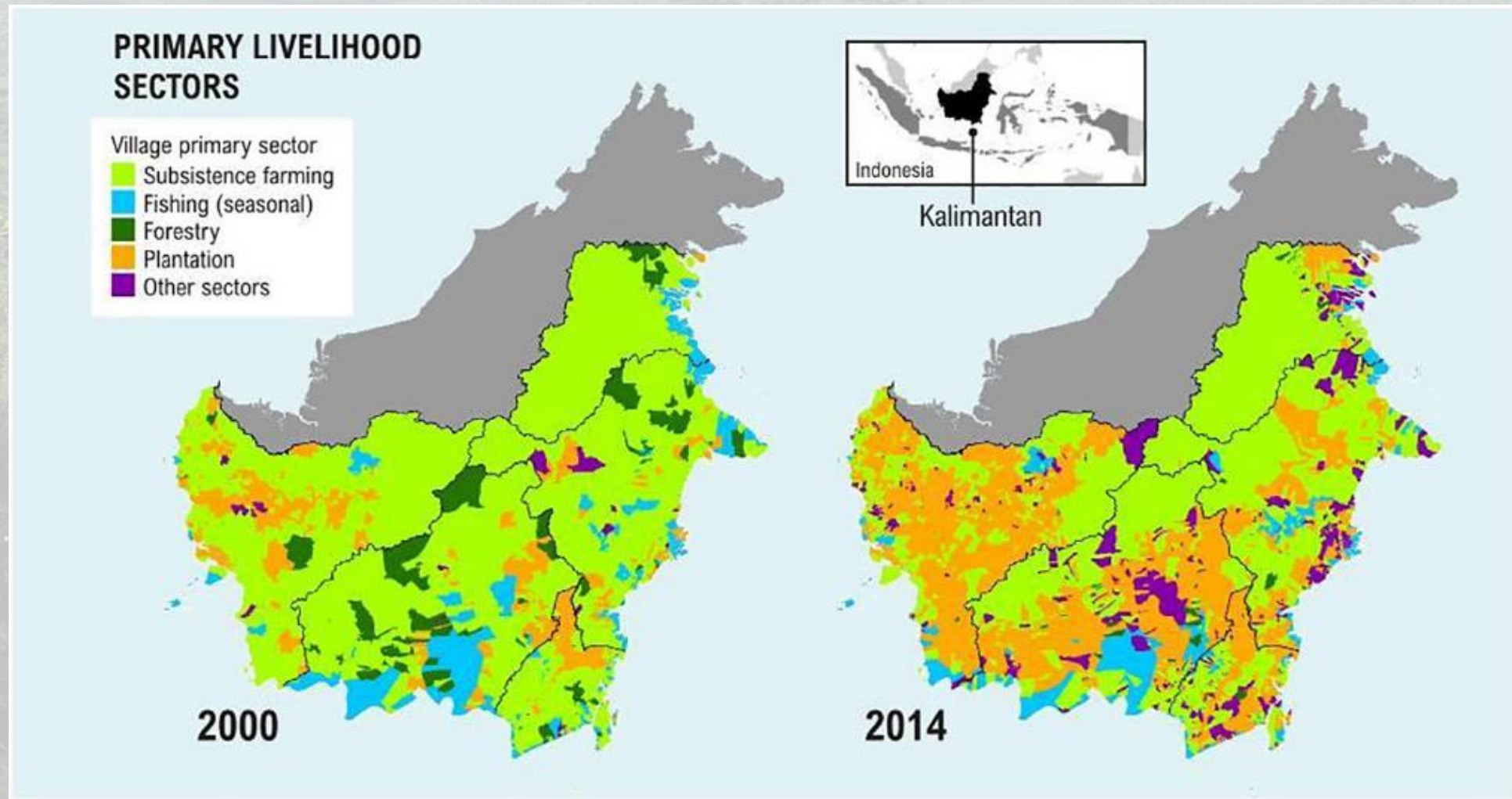
**Kerrie Wilson: QIT, Australia**

**Marc Ancrenaz & Tun Min Poh, Borneo Futures  
Liz Law, Nina, Norway  
Meindra Sabrih, BPS Indonesia**



  *To be submitted soon!*

# Initially a focus on development in Kalimantan





# Sustainable oil palm



# Poverty is implicit in the SDGs

*“ Poverty is more than the lack of income & resources... Its manifestations include hunger & malnutrition, limited access to education... social discrimination & exclusion, as well as the lack of participation in decision-making ” (SDG1)*

## SUSTAINABLE DEVELOPMENT GOALS



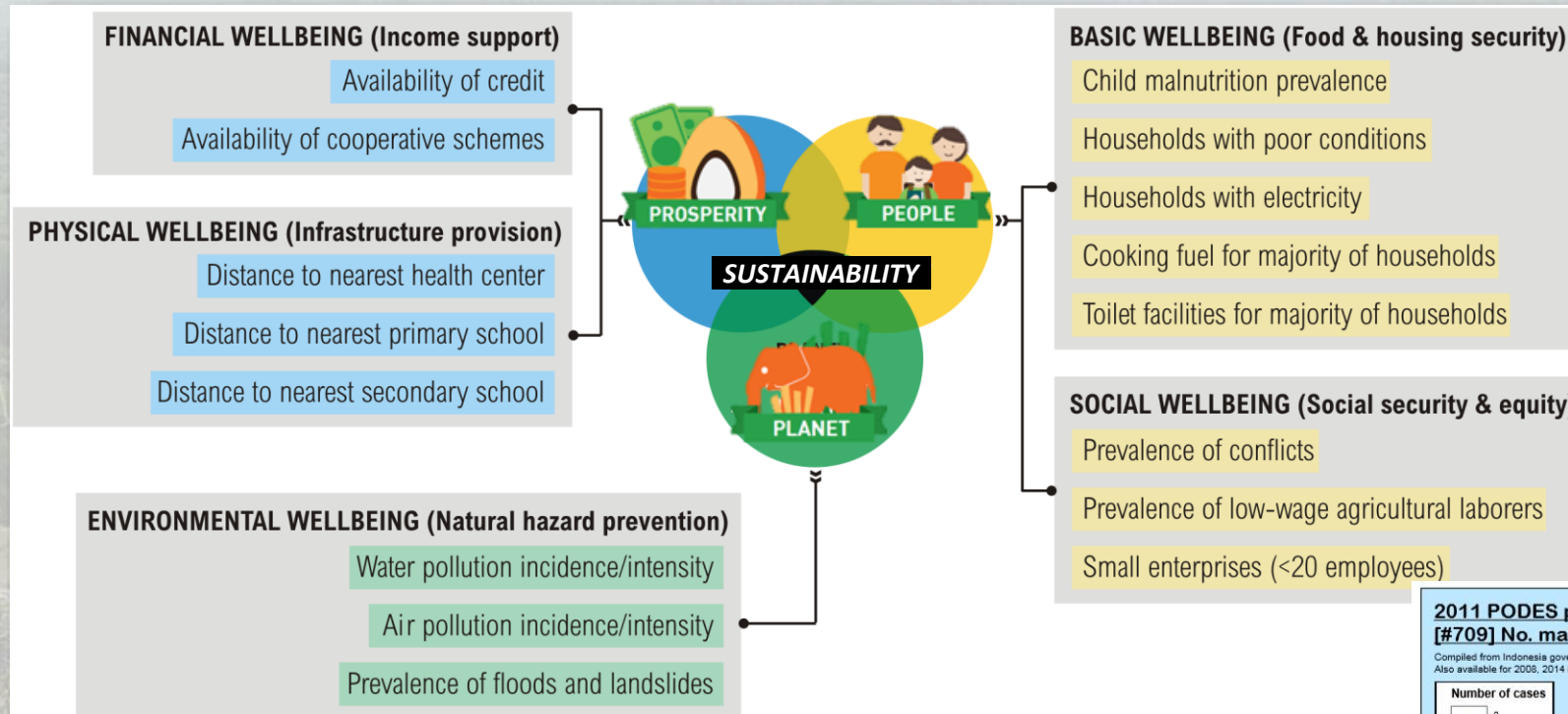
**Wellbeing** : The state of being comfortable, healthy, or happy (Oxford Dictionary).

Wellbeing comes from a **capability** to function in society.

**Poverty**: arises when people lack capabilities.

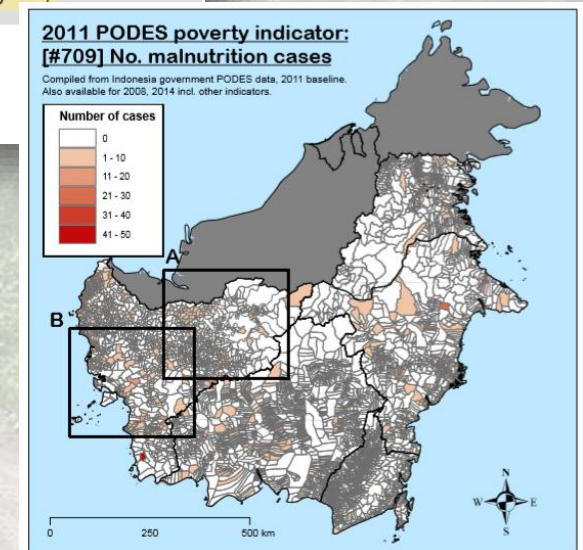


# Poverty is multidimensional



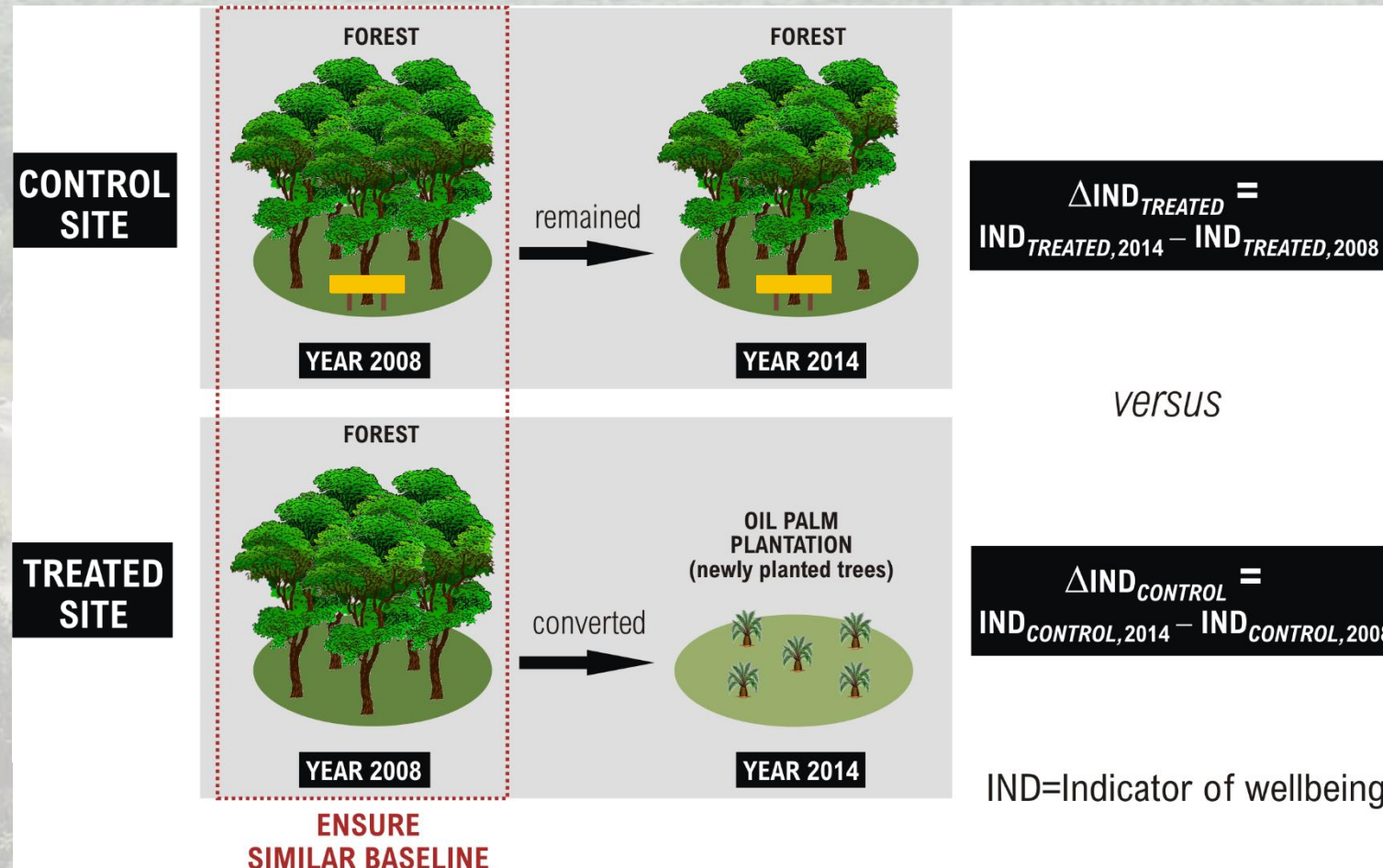
**18 indicators to reflect basic, financial, physical, environmental & social aspects of wellbeing**

6,600 Kalimantan villages : *PODES* census every 3 years, 2000-2018: 1 - 5,000 km<sup>2</sup> extent ( $\bar{x}$  = 80 km<sup>2</sup>)



# Method: A matched site comparison

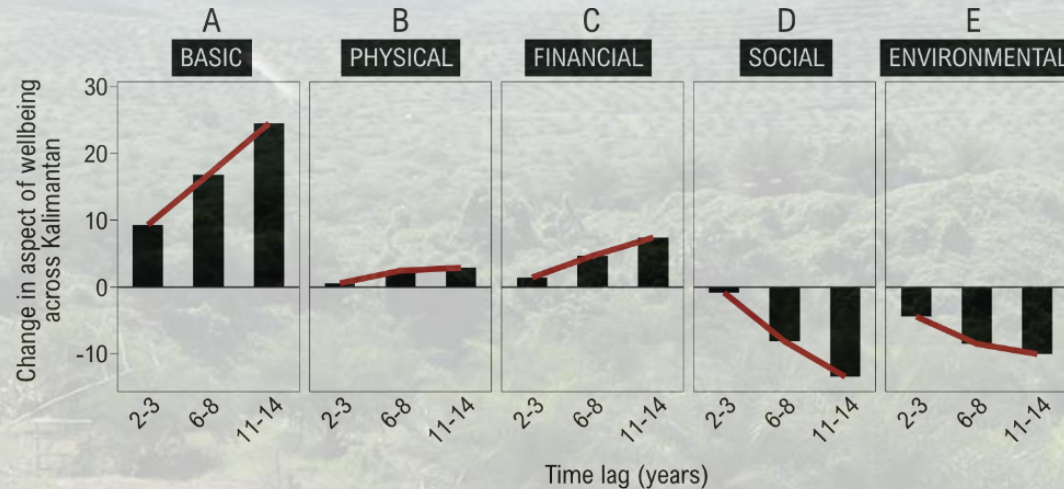
- **Counterfactual analysis using propensity score matching**  
Spatial matching of what would have happened in absence of oil palm





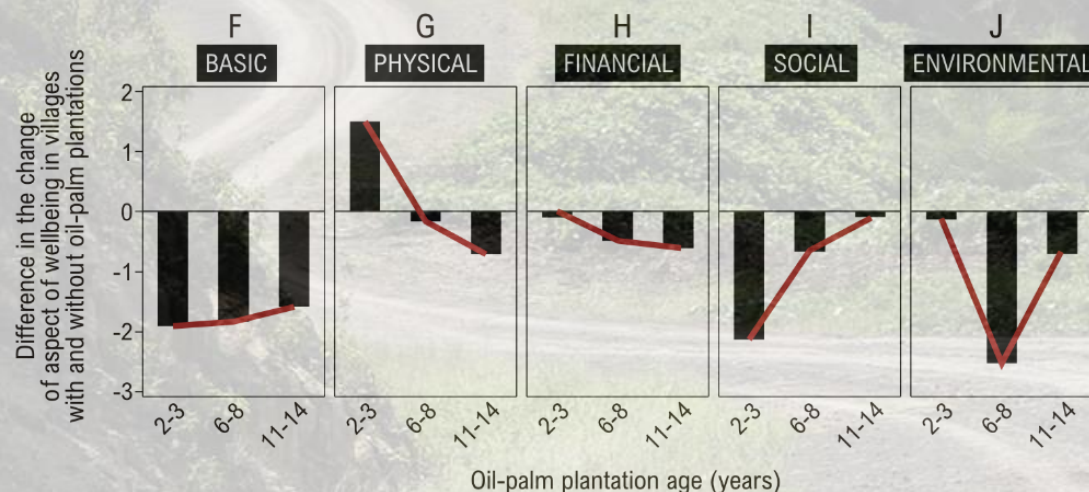
# Oil palm hasn't alleviated poverty in Kalimantan

## Across Kalimantan...



- Basic, physical & financial wellbeing improved in all villages  
But social & environmental declined.

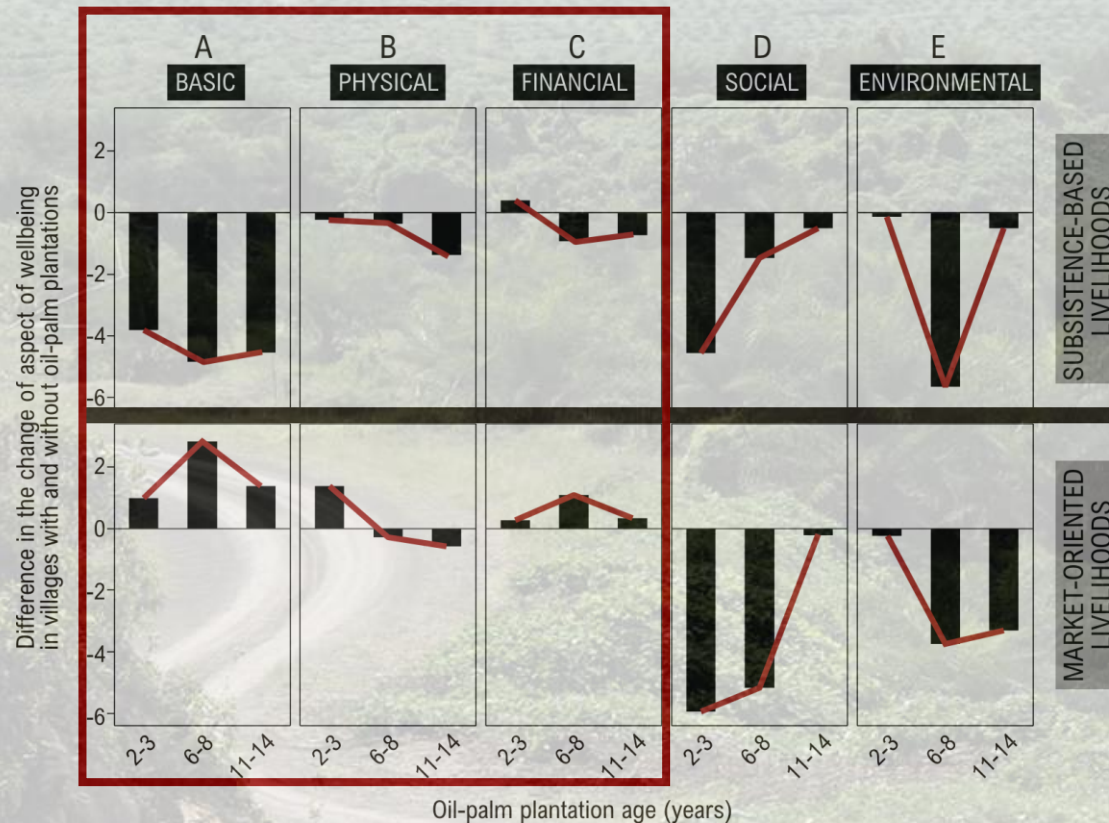
## Oil palm compared to counterfactual...



- BUT** improvements were slower in villages with oil palm  
(with similar biophysical features)
- And a faster decline in social & environmental wellbeing



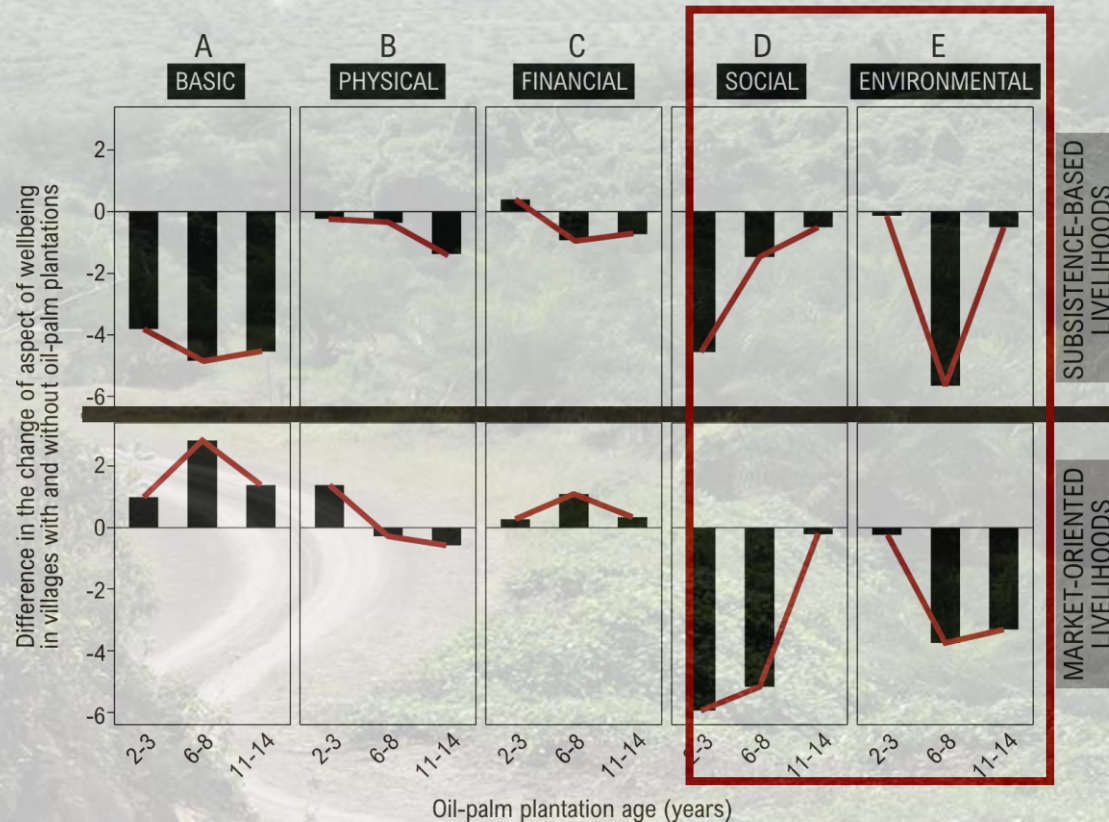
# Impacts varied with baseline village conditions



- **Negative impacts on basic, physical and financial in areas with subsistence livelihoods**  
 But positive change in areas with market-oriented livelihoods



# Impacts varied with baseline village conditions



- **Negative impacts on basic, physical and financial in areas with subsistence livelihoods**

But positive change in areas with market-oriented livelihoods

- **Negative impacts in social and environmental wellbeing throughout**

But more severe in villages formerly relying on subsistence-based livelihoods



# Expansion of oil palm in Indonesia



Oil palm plantations

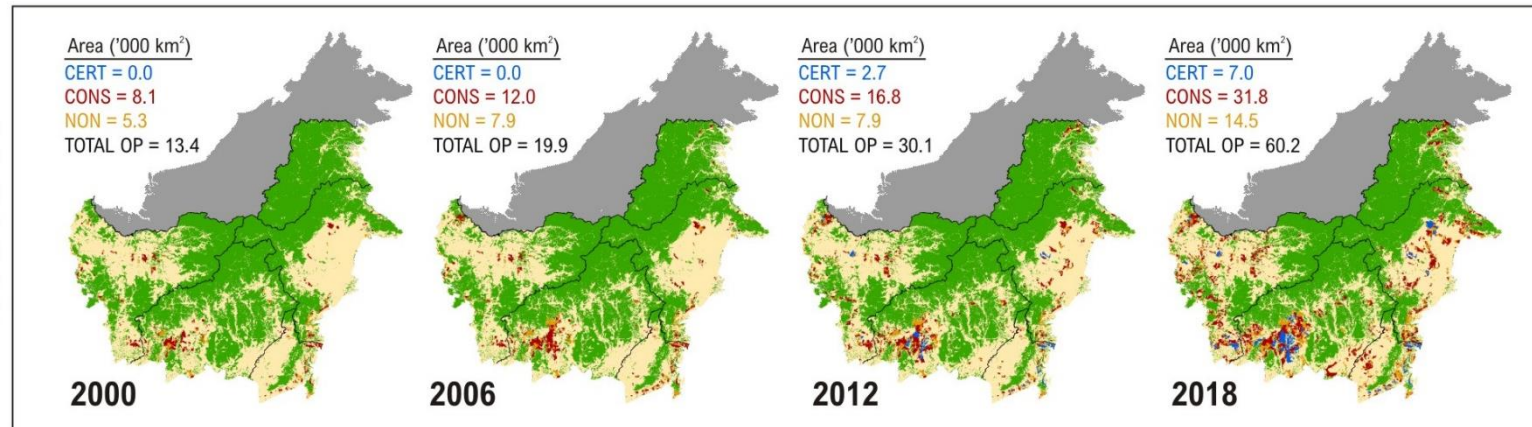
- RSPO Certified (CERT)
- Non-certified within Concession (CONS)
- Non-certified outside Concession (NON)

Non oil palm plantations

- Natural forest (Primary and Secondary)
- Non forest land



KALIMANTAN





# Expansion of oil palm in Indonesia



## Oil palm plantations

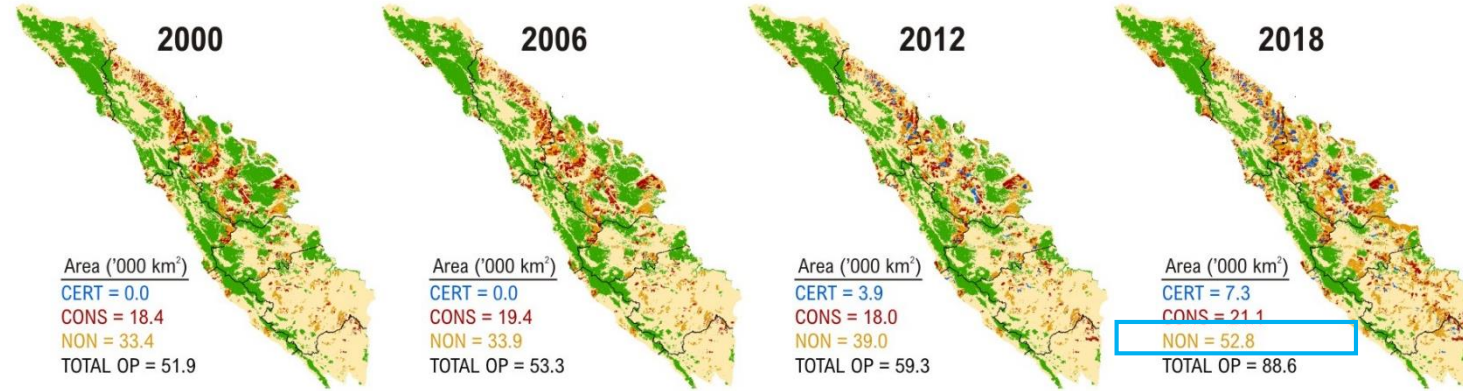
- RSPO Certified (CERT)
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## Non oil palm plantations

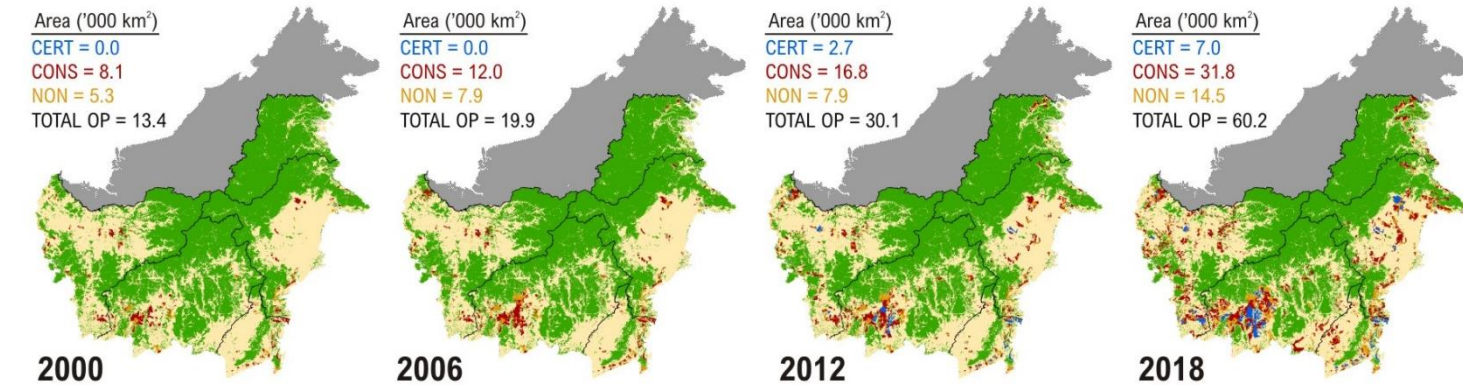
- Natural forest (Primary and Secondary)
- Non forest land



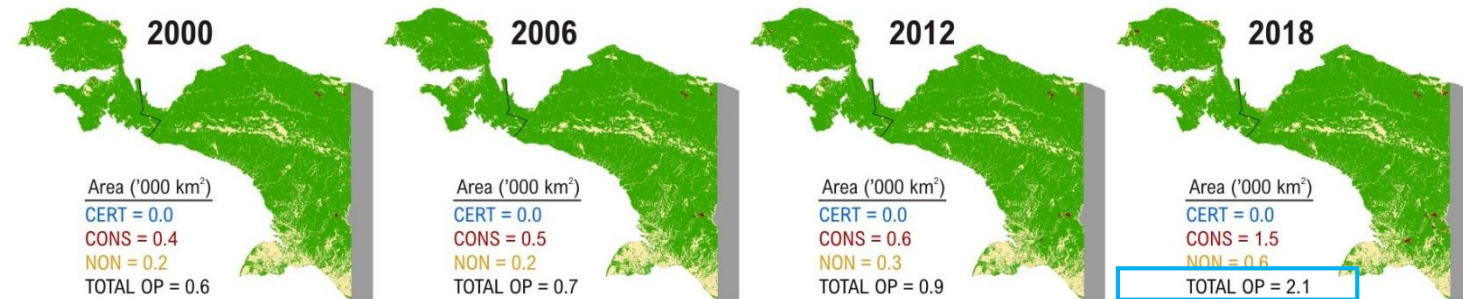
## SUMATRA



## KALIMANTAN

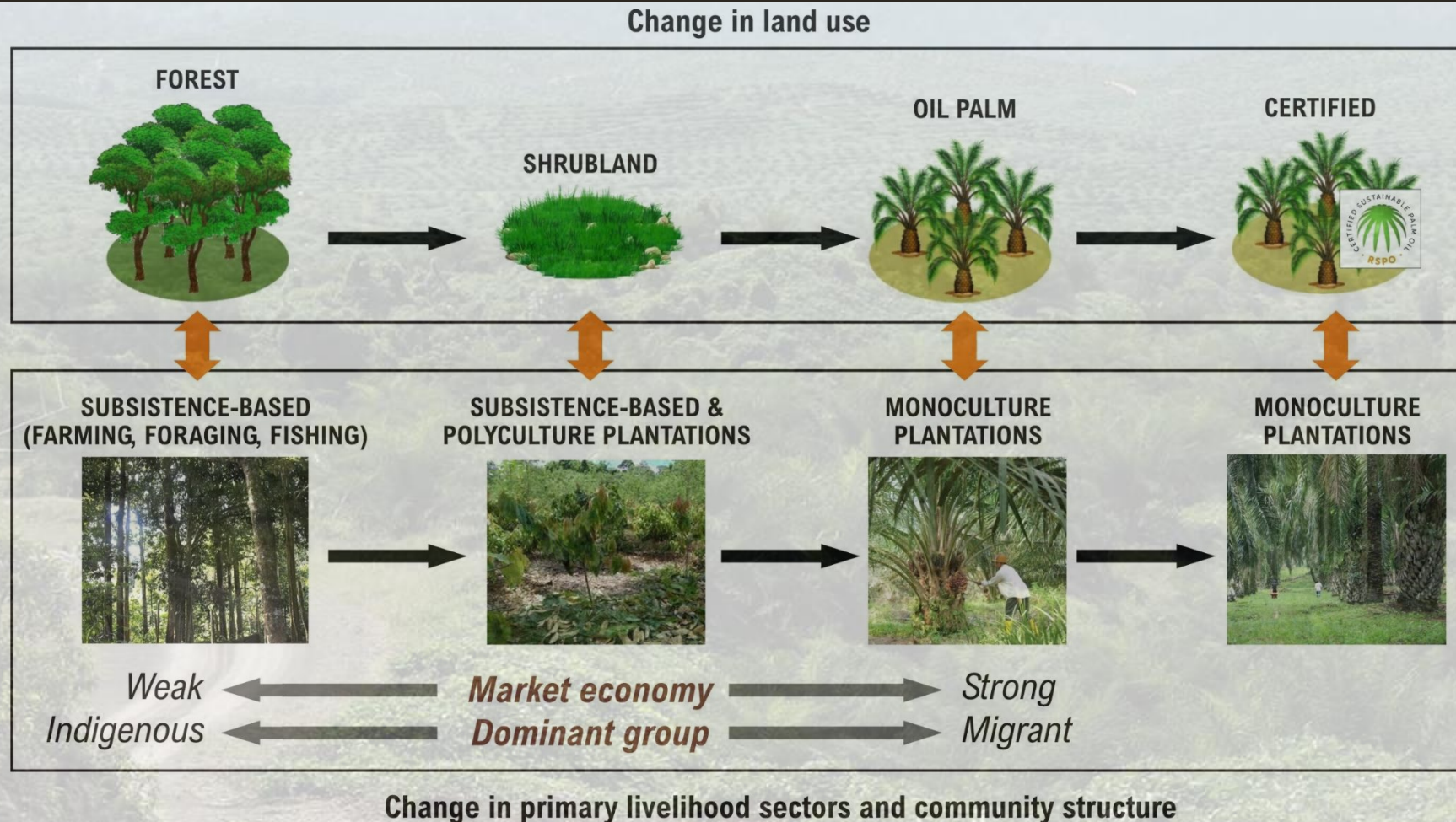


## PAPUA





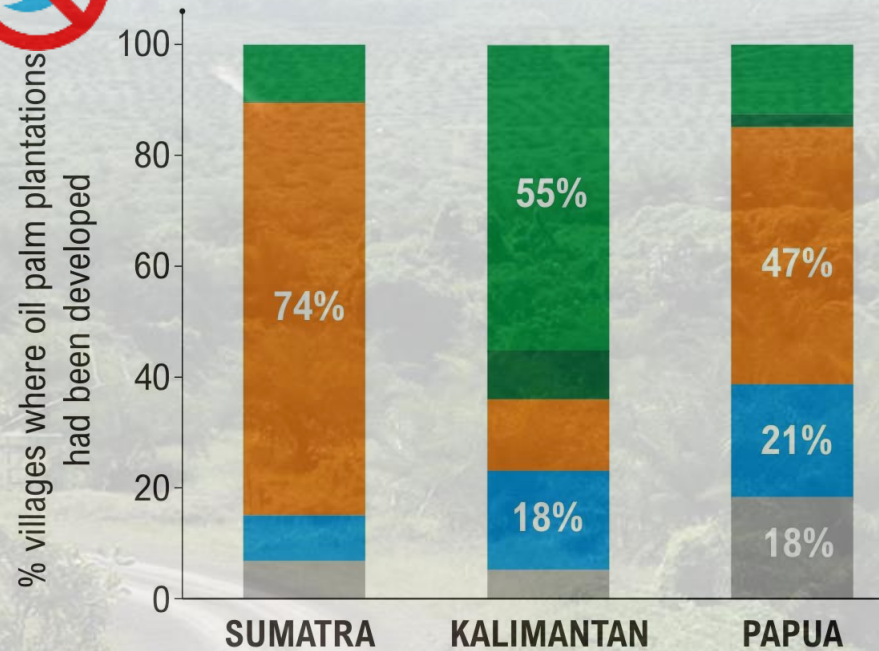
# The transition to certified oil palm



- **More important is transition of livelihoods rather than land use**  
The baseline wellbeing conditions in each livelihood sector differs.



# The transition to certified oil palm



## ■ *In Kalimantan...*

*Oil palm mostly developed in villages with subsistence-based livelihoods*

## ■ *In Sumatra...*

*In villages with plantations as primary sector (i.e. already market-based livelihoods)*

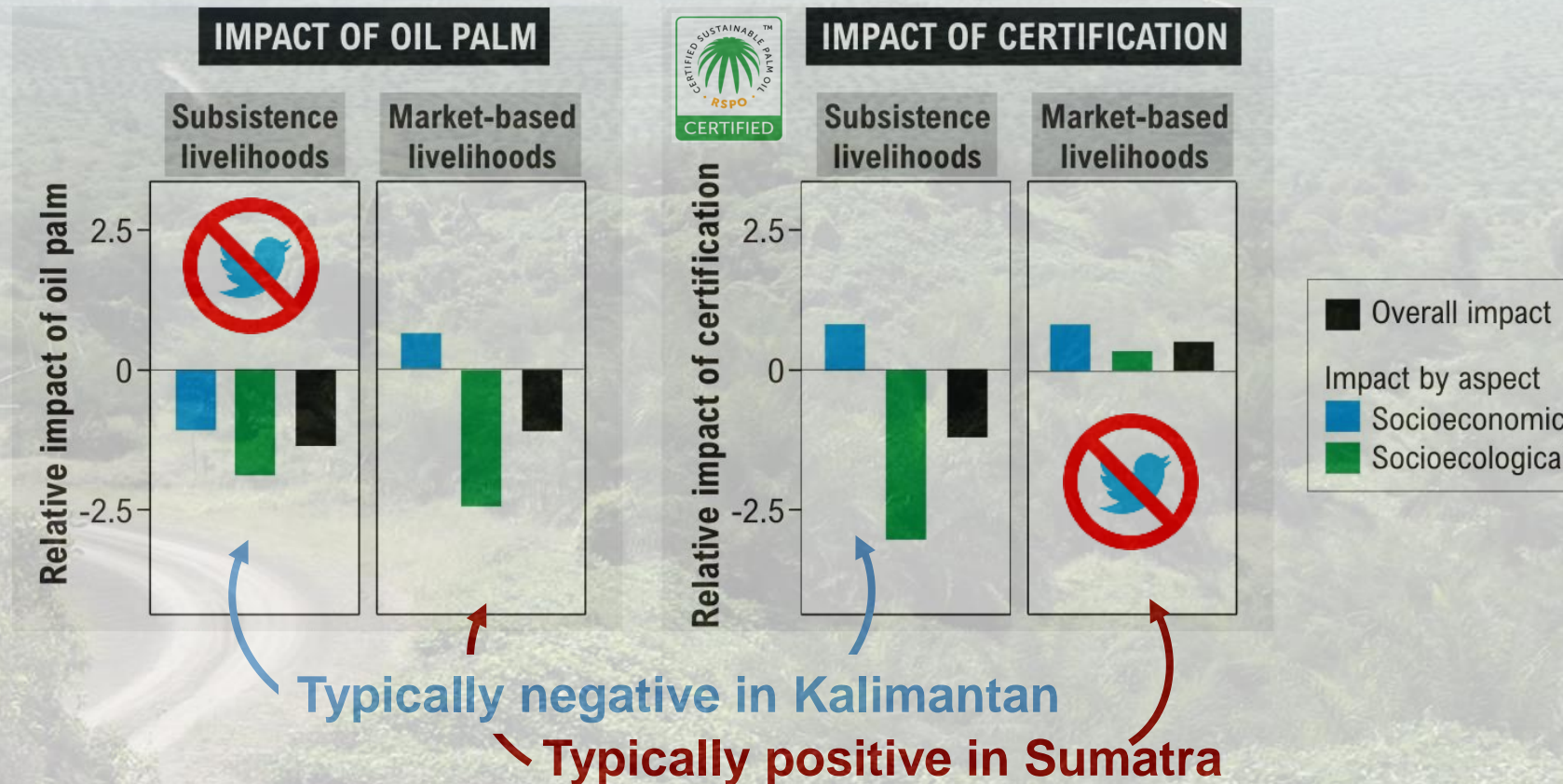
## ■ *In Papua...*

*In villages with plantations or wet rice farming in transmigration areas*



# Overall impact of RSPO on poverty varied

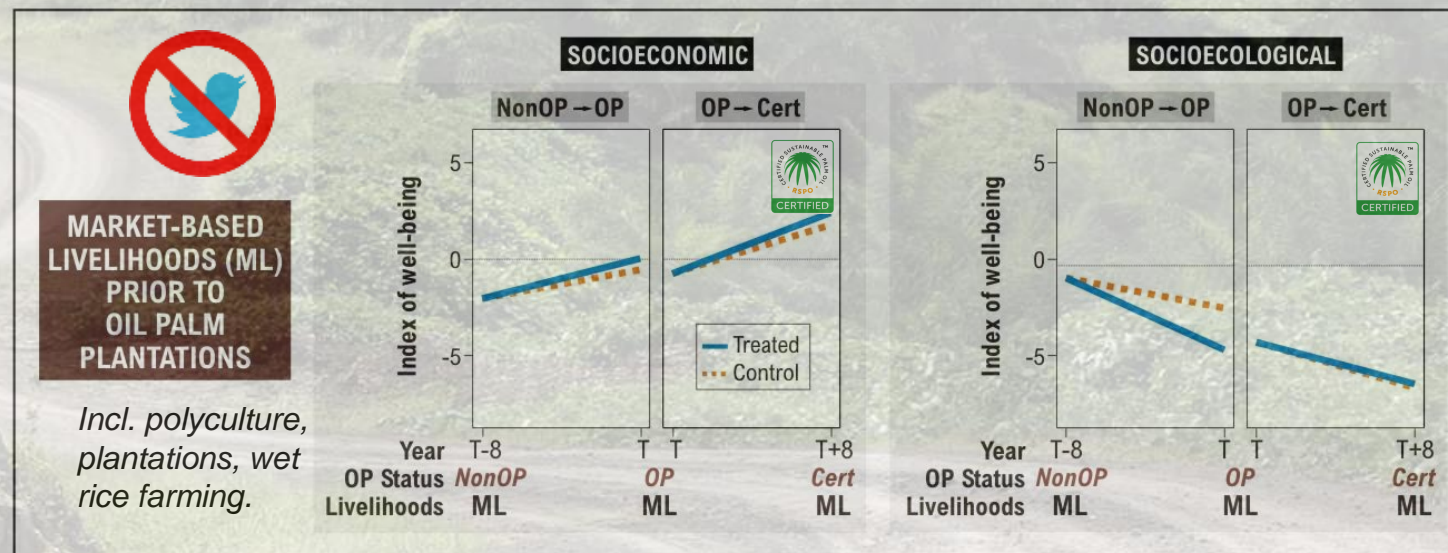
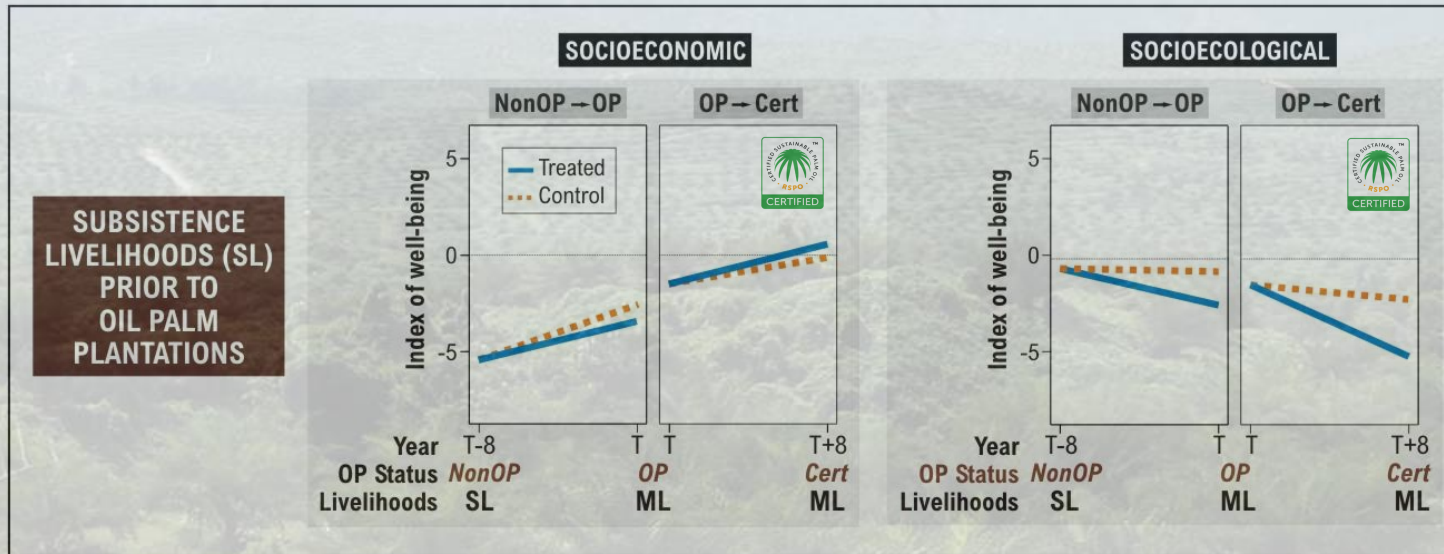
*Across Kalimantan, Sumatra & Papua, 2000-2018*



- ***RSPO impact also depends on underlying livelihood conditions***  
Negative in subsistence areas; positive in market-based areas

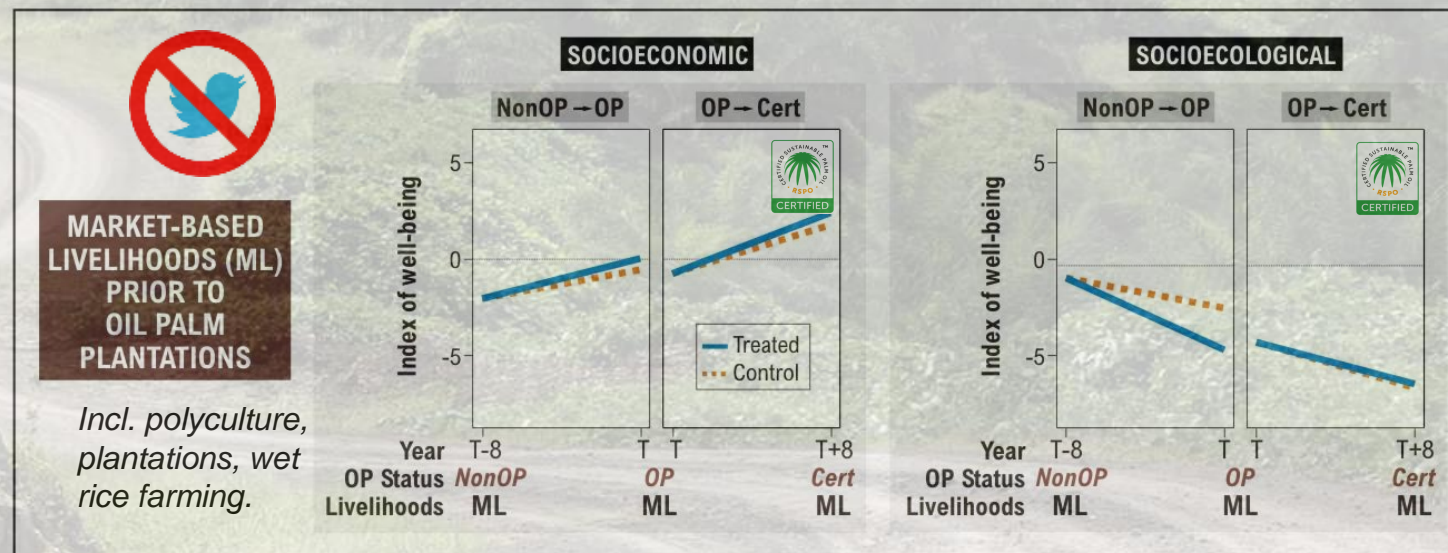
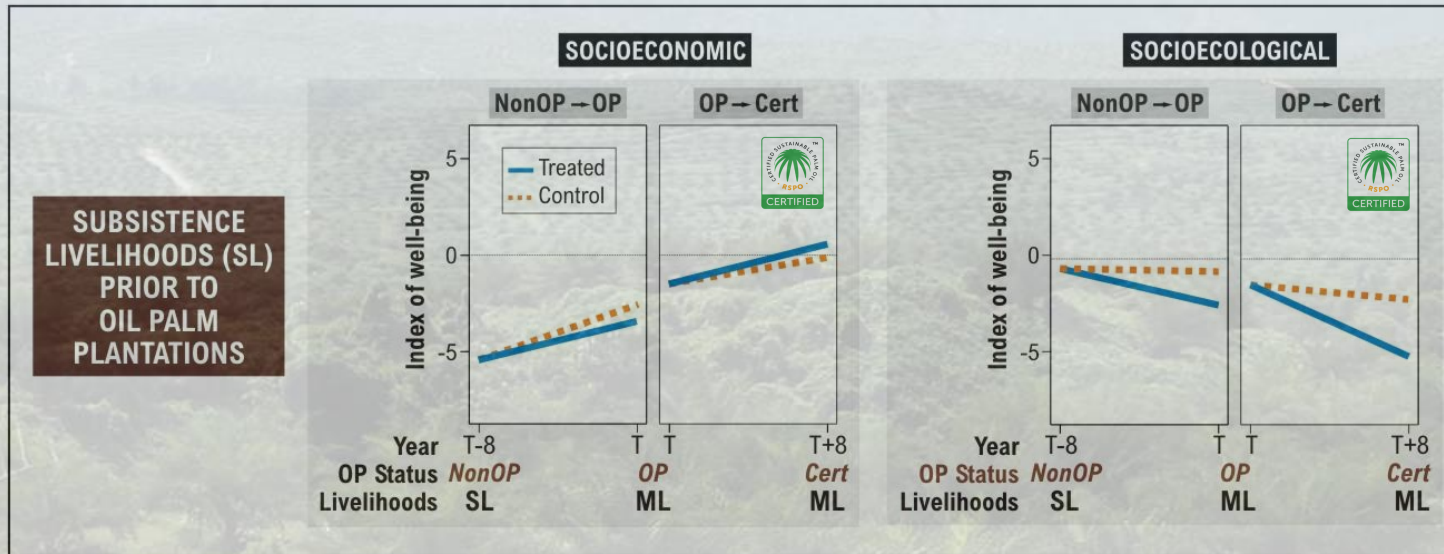


# Wellbeing through the certification process



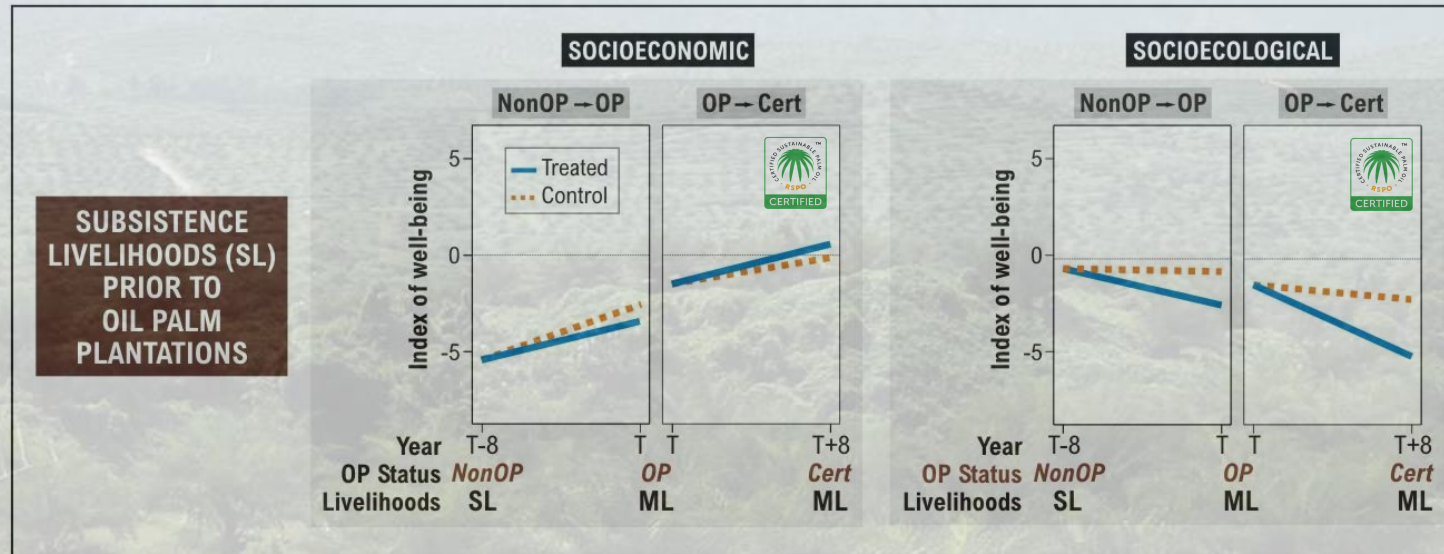


# Wellbeing through the certification process





# Welfare change through the certification process

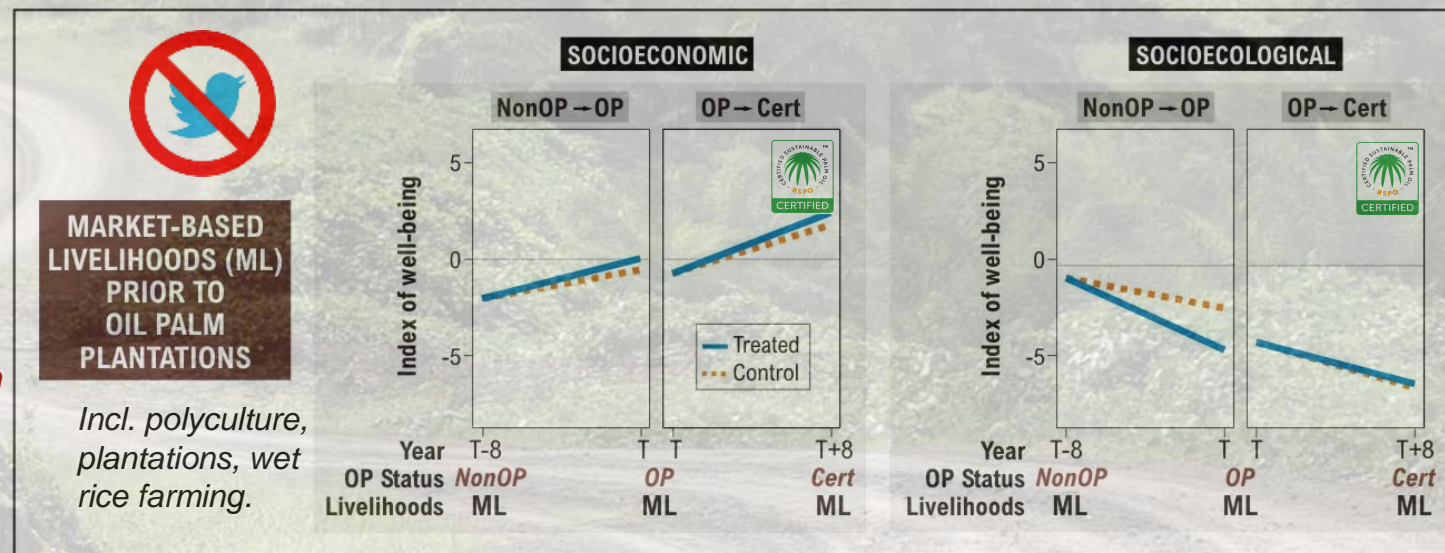


**Typical of Kalimantan**

*Where more oil palm developed in villages relying on subsistence based livelihoods*

**Typical of Sumatra**

*Where more oil palm developed in villages already using polyculture plantations*



*Incl. polyculture, plantations, wet rice farming.*



# Key messages for oil palm certification

1. **RSPO has led to improved wellbeing in Sumatra**  
*Especially areas already degraded, with market-based livelihoods.  
(though conditions are worse than the baseline before palm established)*
2. **RSPO appears to have been much less effective in Kalimantan**  
*Mainly these are areas where subsistence-based livelihoods  
dominated before plantations established. Many in coastal peatlands.*
3. **Likely positive outcome for Papua the short term (like Sumatra)**  
*Still early days. So far most palm (incl RSPO sites) are in areas where  
market-based livelihoods are more common...*
4. **Emphasises importance of baseline conditions**

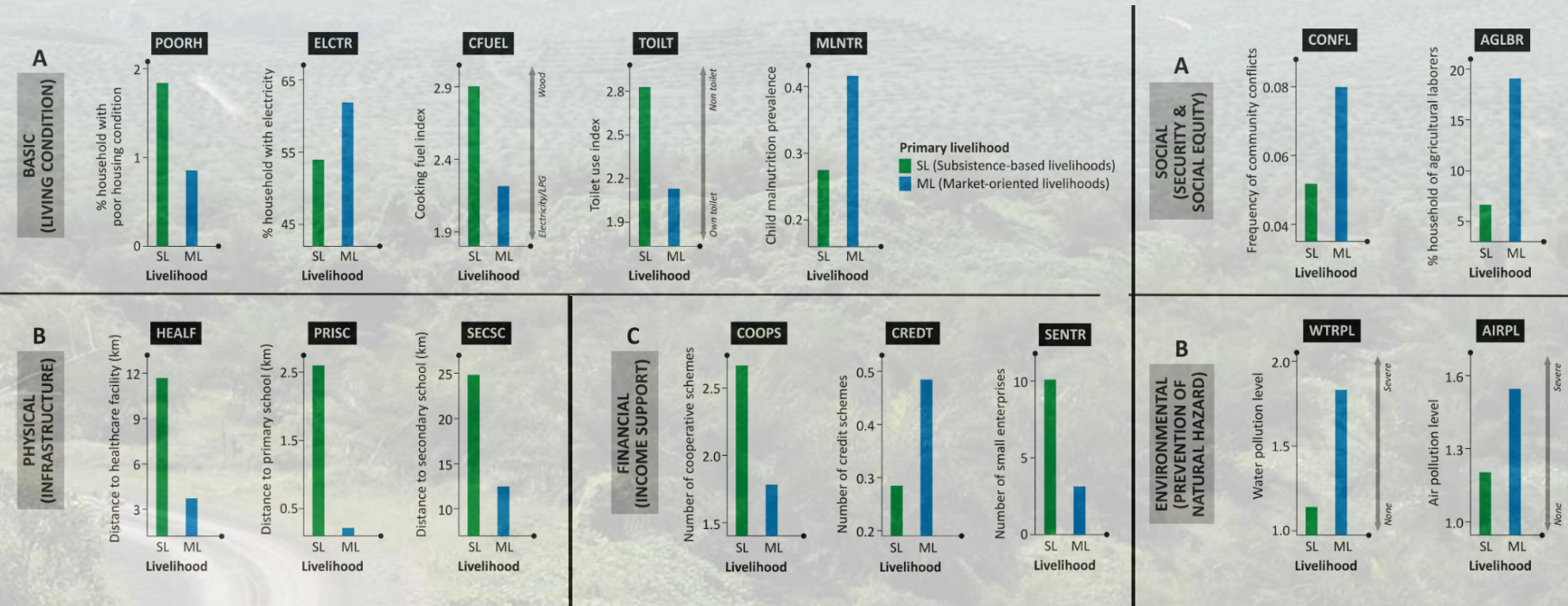
Terima kasih!







# Characteristics of areas dominated by subsistence vs market based livelihoods



- Living conditions, infrastructure, retail & access to credit are lower in areas dominated by subsistence-based livelihoods  
 60% of all new oil palm plantations in Kalimantan between 2000 and 2014 were developed in these areas.



# Oil palm development pathways

