On the profitability of sustainability certification: An analysis among Indonesian palm oil smallholders

Nia Kurniawati Hidayat
Research questions

1. To what extent and in what way is sustainability certification profitable for Indonesian palm oil smallholders?

2. Is certification still profitable for Indonesian palm oil smallholders if they have to pay all certification costs themselves?
Previous studies on profitability of certification:

- Neglected the assessment of non-certified smallholders
- Covered part of certification costs
- Did not include the entire lifespan of oil palm plantation
- Remain inconclusive
Conceptual framework

Partnership/contract/agreement: Market access, Technological transfer, Agricultural extensions

Government support

Non-certified oil palm plantation
- Investment costs
- Operating costs
- Benefits

Certified oil palm plantation
- Investment costs
- Operating costs
- Benefits

Socioeconomic characteristics

Profitability of non-certified plantation

Costs of certification

Benefits of certification

Profitability of certified plantation

Certification
Methods

- Socio-economic characteristics
- Level of organization
- Difference starting points

Study sites

Data collection

Data Analysis

- NPV
  - Socio-economic characteristics
  - Level of organization
  - Difference starting points
Profitability of certification on actual scenario

- Certification is currently profitable for scheme and independent smallholders

<table>
<thead>
<tr>
<th>Criteria</th>
<th>ΔNPV</th>
<th>Resulted from</th>
</tr>
</thead>
</table>
| NPV certified scheme > non-certified scheme         | 35%  | • Higher productivity  
• Lower operating costs e.g. pesticides, fertilizers and maintenance costs |
| NPV certified independent > non-certified independent| 89%  | • Higher Productivity  
• Higher selling price (bypass middlemen), premium price (incentive from better quality), premium fee (from selling RSPO certificate) |
Profitability of certification on actual scenario

- Other factors affecting profitability of certification
  - Level of organization: $\Delta \text{NPV} = 34\%$
  - Starting point conditions: $\Delta \text{NPV} = 1-3\%$

- Productivity
- Premium price
- Premium fee

- Reducing cost of pesticides
Profitability of certification on self-funded scenario

• Certification is profitable for independent smallholders, but not for scheme smallholders who are better off before joining certification

• Cost of certification : Independent > Scheme
• Premium received : Independent > Scheme

• If premium price is removed, certification will not be profitable for both independent and scheme smallholders
Conclusion

• Certification is profitable for smallholders under current condition

• To what extent certification is profitable depends on the initial performance of smallholders

• Premium prices are crucial especially in self-funded condition

• Without premium prices certification is no longer profitable for all smallholder types.