Inclusive Business Models for Indonesian Palm Oil Smallholders

Joni Jupesta¹, Benyamin Lakitan², Yuko Harayama³

¹) United Nations University- Institute for the Advanced Study of Sustainability (UNU-IAS), Tokyo-Japan
²) Ministry of Research, Technology and Higher Education, Jakarta-Indonesia
³) Council for Science and Technology Policy (CSTP), Cabinet Office, Tokyo-Japan
Content

• Transitions to Emerging World
• Innovations Ecosystem
• Palm Oil in Indonesia
• Inclusive Business Model
• Innovative Financing Scheme
Transitions from Rich World to Emerging World

GDP per person, 2010, PPP $'000

EMERGING WORLD
- <5
- 5-10
- 10-16
- 30-35
- 35-40
- >40

RICH WORLD

Population 2010, bn

Official foreign-exchange reserves, Q2 2011

Emerging world $6.5trn
Rich world $3.2trn

Breakdown by currency
Allocated reserves, Q2 2011, %

Sources: IMF; UN; The Economist

http://www.economist.com/node/21528979
Innovations Ecosystem

New Green Growth Innovation

Macroeconomic Environment

Research ↔ Development ↔ Demonstration ↔ Market Formation ↔ Diffusion

Innovation activity

Public Sector ↔ Organizations and Actors ↔ Business / Entrepreneurs

Enabling Policies

Education / Research ↔ Financiers

Skills and Capabilities

International Collaboration

Source: Modified from U.N. World Economic and Social Survey 2011.
110,000,000 jobs in Indonesia

43,000,000 jobs in agriculture sector

Palm oil industry employs 4,5 million people
Value and Volume Export CPO and Derivatives Period 2008-2012

Ministry of Trade, Indonesia
Productivity Comparison of Vegetable Oil

Source: Oil World 2011

- The average productivity of Indonesian industry: 3.0 t/ha/tahun
- The average productivity of smallholder/independent farmers: 2.0 t/ha/tahun
- The average productivity of the company going forward: 5.5 t/ha/tahun

<table>
<thead>
<tr>
<th>Oil Type</th>
<th>Productivity (t/ha/tahun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palm Oil</td>
<td>4.17</td>
</tr>
<tr>
<td>Canola</td>
<td>0.75</td>
</tr>
<tr>
<td>Sunflower</td>
<td>0.58</td>
</tr>
<tr>
<td>Soybean</td>
<td>0.4</td>
</tr>
<tr>
<td>Others</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Source: Oil World 2011
Existing Oil Palm in Indonesia (estimated)

- Private Industry: 49%
- State-owned enterprises (BUMN): 8%
- Independent Farmers: 2 Mil Ha
- Scheme Plasma Farmers: 2 Mil Ha
- Smallholders Farmers: 43% ~ 4.0 mil Ha

Oil Palm Planted Area: 9.2 Mil Ha

- Existing Oil Palm in Indonesia: estimated

- Oil Palm Land Area: 189 Million Ha

Yield:
- 2-3 Ton/Ha/Year
- 5-6 Ton/Ha/Year

Source: Indonesia Chamber of Commerce, 2014
Oil Palm Inclusive Business Model

Innovative financing schemes Nucleus – Plasma through cooperatives

- **Corporate Partners**: Help companies find funding and as an avalist.
- **Farmers**: Companies buy fresh fruit bunches from farmers and provide technical cultivation of oil palm. Farmers through cooperatives pay loan installments plus interest through the sale of Fresh Fruit Bunch.
- **Cooperative**: Cooperative credit disbursement of binding and development of oil palm plantations.
- **Bank**: Provide funding to the Cooperative.
Implementation case in Indonesia
Innovative Financing Scheme Nucleus – Independent through Cooperatives

Bank provides financing via cooperative

Bank: Bank Mandiri

Cooperative: PT Berkat Ridho

Cooperative with company will invest for plantation and cut installment after harvest

Partner Company: PT Ramajaya Pramukti

Company as guarantor / credit avalist to bank

Petani: Nunung Mulyadi

Together with cooperative and company managed plantation sustainably

Indonesia Chamber of Commerce, 2014
• There has been a successful efforts to accelerate the development of oil palm smallholder in the early 1980’s through a Nucleus Estate Smallholder (NES) project supported by the World Bank

• The innovative finance is to address their cost of living during the replanting period for 4 years otherwise the farmer will be reluctant to enter the scheme
Innovative Financing On Oil Palm

- Replanting 2 Million Ha
- 1 Million Independent Farmers
- Yield Increase 2 – 3 Ton
- Up to 5-6 Mil Ton/Ha/Year
- Income Increase
- CPO Price 5-6 Mil Ton x USD 800 = USD 4-5 Billion/Year
- Save New Land opening 1 Mil Ha Forest

Indonesia Chamber of Commerce, 2014
A New Vision for Agriculture

Food Security
Yield increase to 5 - 6 million tons/year for 1 million farmers

Environmental Sustainability
Safe new land opening of 1 million Ha of forest area

Economic Opportunity
Increase of income US$ 4 - 5 billion/year for the 1 million farmers

PISAgro, 2014
The breakthrough of innovation financing program is to provides living expenses (Rehabilitation Cost) for the duration of the immature plant (4 years) as part of the construction cost as well as interest rates.
Acknowledgments

• Ministry of Agriculture, Indonesia
• Ministry of Trade, Indonesia
• Ministry of Forestry and Environment, Indonesia
• PISAgro (Partnership for Indonesia’s Sustainable Agriculture)
• Golden Agri Resource Ltd
Thank you!

For further information please contact:

Joni Jupesta  
United Nations University- Institute for the Advanced Study of Sustainability (UNU-IAS)  
jupesta@unu.edu