Agenda

• Status Quo
• Current Challenges in Access to Finance for Smallholders
• Certification as Condition for Access to Finance
• Long-Term Finance and Replanting
• Case Studies – Plantation Companies
• Case Studies – Financial Sector
• An Integrated Approach: 6 Core Elements
• Conclusions
Status Quo

- Palm oil production is expected to rise in the coming decades
  - Increasing world population
  - Increasing living standards per capita
- Smallholder farmers (<2 ha of land) make up a large share of the production in Indonesia and Malaysia

Different situations in Malaysia and Indonesia:

<table>
<thead>
<tr>
<th>Malaysia</th>
<th>Indonesia</th>
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<tbody>
<tr>
<td>Large involvement of the public sector</td>
<td>Gradual shift from state funding to more commercially oriented investment models</td>
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<tr>
<td>Financial sector focuses on large plantation companies &amp; less reliance on supply chain financing schemes</td>
<td>Involvement of the private sector led to innovative financing schemes based on supply chain relationships</td>
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<td>To meet production targets, large government-sponsored schemes have been implemented to subsidy replanting for smallholders and improve yields (e.g. TSSPK)</td>
<td>The financial sector struggles with financing smallholders and implementation challenges are significant</td>
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Current Challenges in Access to Finance for Smallholders

Financial Sector Challenges:
- Strategy shift from large plantation companies and mills to micro enterprises
- High operational cost due to remote location results in a perceived unattractive risk/reward equation
- Lack of quality financial info and inconsistent data leads to subjective, biased and uninformed credit decisions

Government-related Challenges:
- Land legality and land rights formalization
- Poorly maintained infrastructure
- Support in strengthening cooperatives and farmers’ organizations

Other Challenges:
- Hard reliance on fixed assets as collateral from financial sector as dictated by OJK loan-to-value regulations
- Need for provision of guarantees and interest subsidies for long-term finance

Financing needs of smallholders:
- Input financing
- Working capital loans
- Long-term replanting loans
Certification Standards as Condition for Access to Finance

Incorporation of Sustainability Criteria into Investment Process
Investors are starting to incorporate sustainability criteria and certification as part of their investment loans to producers.

Costs/Benefits Analysis
Smallholders face high start-up costs to become certified, including membership, training, certification and monitoring. On the other hand, payback period from improved yields becomes much shorter due to market price premium on their FFB

<table>
<thead>
<tr>
<th>Costs (IDR/Ha)</th>
<th>Benefits</th>
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</thead>
<tbody>
<tr>
<td>Registration &amp; Documentation</td>
<td>334k</td>
</tr>
<tr>
<td>Plantation Mapping</td>
<td>370k</td>
</tr>
<tr>
<td>Equipment</td>
<td>2,470k</td>
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<tr>
<td>Training &amp; Compliance</td>
<td>650k</td>
</tr>
<tr>
<td>Inspection &amp; Audit</td>
<td>3,060k</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,883k</strong></td>
</tr>
</tbody>
</table>

CPO Price Premium per tonne: 25 USD

Smallholders require Financial Support for Certification
- Smallholders may require support to undertake certification and avoid exclusion from sustainable supply chains
- Lenders, instead of imposing certification as a requirement for credit, could offer discounts in exchange of commitment to certified production. This is common in Malaysia and slowly gaining traction in Indonesia
- Certification costs may be rolled into replanting loans as they only represent a small percentage of total loan
Long-term Finance and Replanting

Urgency
In the next 25 years (2017-2041) every year around 175,000 hectares of oil palm are estimated to require replanting.

Investment opportunity
With an estimated replanting cost per Ha of USD 4000, the investment opportunity for long-term financing is of USD 700 Million per annum.

Opportunity to improve smallholders’ livelihood and sustainability practices
Falling yields lead to deforestation (‘slash and burn’). Replanting high-quality seeds coupled with better agronomic practices means higher yields at existing land (zero deforestation) and improved farmers’ income.
## Case Studies – Palm Oil Plantations

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Essential Points</th>
<th>Challenges</th>
</tr>
</thead>
</table>
| Golden Agri Resources        | • Facilitate A2F  
• GAP, high-quality seeds lead to improved yields  
• ISPO certification  
• Subsidized interest rates and replanting grace period  
• Focus on Riau, GAR supply shed  
• Full guarantee from GAR with long-term FFB delivery commitments | • Reliant on corporate guarantee and subsidized interest rate  
• Reliant on governmental certification programs for formalization of land titles  
• Reaches mainly to organized (plasma/ex-plasma) farmers in GAR’s supply shed                       |
| Musim Mas / IFC              | • Mostly advisory focused  
• Ensures GAP and BPM  
• Envisages RSPO,ISPO or ISCC certification  
• Focus beyond Musim Mas supply chain | • Conceptual approach and advisory-based  
• Lack of standardized approach for scale-up (long-term) financing                                     |
| PT Perkebunan Nusantara XIII | • Government-owned plantation company  
• GAP, high-quality inputs and long-term financing                                                                                                                                                                    | • Reliant on corporate guarantee and subsidized interest rate                                          |
# Case Studies – Financial Sector

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Essential Points</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Commercial Banks (CIMB Niaga, Mandiri, BRI Agro)</td>
<td>• Development of ad-hoc loan products for replanting</td>
<td>• Strongly reliant on hard collateral, plantation business licenses, corporate guarantees and government support</td>
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<td></td>
<td>• Step-up interest structure with government-subsidized rates during the production gap</td>
<td></td>
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<td>• Impact Investors (Tropical Landscapes Finance Facility)</td>
<td>• Public-Private Partnership</td>
<td>• Large ticket size of investment requires farmers to be structured in portfolios</td>
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<td></td>
<td>• Investments across palm oil, wind and solar energy with blended finance provided by BNP and DFIs</td>
<td>• Independent smallholders are excluded as they cannot/ do not want to commit to long-term FFB delivery commitments</td>
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<tr>
<td></td>
<td>• When projects reach a certain size and economic returns, loans are pooled together and converted into (green) bonds sold to DFIs and institutional investors</td>
<td></td>
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<td></td>
<td>• Currently used by GAR in Riau</td>
<td></td>
</tr>
<tr>
<td>• Development Finance Institutions (FMO/IDH – Smallholder Finance Facility)</td>
<td>• Co-financing smallholders with supply chain actors in coffee, cocoa and palm oil</td>
<td>• Still at inception phase for long-term finance</td>
</tr>
<tr>
<td></td>
<td>• GAP, high-quality inputs and long-term financing</td>
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An Integrated Approach: 6 Core Elements

AN INTEGRATED, SCALABLE AND COST-EFFECTIVE FINANCE AND SUPPORT SCHEME FOR SMALLHOLDERS

1. Selection of Appropriate Jurisdiction - Landscape Siting Tool
2. Supply Chain Analysis and Contracting - Mapping and Due Diligence
3. Credit Scoring Tool – Data Collection, Cash Flow Forecasting and Scoring
4. Portfolio Approach – Structured Finance
5. Technical Assistance - Smallholder Graduation
6. Technology-enabled Scale-up – Fintech and Monitoring
Replanting Financing Scheme

**Credit services:**
- Farmer selection
- Credit scoring
- Loan origination
- Loan monitoring and reporting

**Legend**
- Money flows
- Trade flows
- Services flows

**Diagram Description**
- **Investors**
- **Off-taker**
- **Oil palm mill**
- **Replantation company**
- **Farmer**
- **KUD**

- Interest & principal payment on disbursed amount (possibly corporate guarantee)
- Long-term loan
- Payment
- CPO
- Payment (minus interest & other charges)
- FFBs
- Payment of replantation services
- Reporting on replantation activities
- Delivery of replantation services
- Technical assistance

**Money Flows**
- Investors to Off-taker
- Off-taker to Oil palm mill
- Oil palm mill to Replantation company
- Replantation company to Farmer

**Trade Flows**
- Investors to Off-taker
- Off-taker to Oil palm mill
- Oil palm mill to Replantation company
- Replantation company to Farmer

**Services Flows**
- Investors to Oil palm mill
- Off-taker to Oil palm mill
- Replantation company to Oil palm mill
- Farmer to Oil palm mill
Bridging the Information Gap - Understand Smallholders Risk Profiles

Financial Cash Flow Model

Collection of: palm oil research and market data, existing financial data from smallholder households, expert judgements and test data from field visits

1. Analyze farming cashflows, side income, farming expenses and personal expenses
2. Develop forecasting models to analyze impact
3. Loan product development that fits palm oil trees lifecycle, production gap and smallholders’ spending behavior
4. Scenario analysis
5. Selection of Key Factors that impact Repayment Capacity

Credit Risk Scoring Tool

4 categories of credit scoring:

- Farmer profile
- Agronomic practices
- Collateral & ownership (Fixed assets but also movable assets)
- Household-level cashflow repayment capacity
• High vs low risk smallholders not easily identifiable
• Unattractive to lenders
• Prohibitive loan origination cost exclude farmers from finance

• Organized farmers (coops or other) are scored using combined data
• Pre-selected smallholders are grouped in portfolios and presented to lenders for financing

• Support farmers with tools and training to improve creditworthiness and ‘upgrade’
• Develop a pipeline of ‘bankable’ farmers
• Challenges for A2F: high operational costs, land tenure security and collateral requirements, lack of reliable data

• Replanting finance represent an opportunity to improve smallholders’ livelihoods and sustainability practices while reducing risks of deforestation

• Private sector initiatives based on improved supply chain relationships are helpful to unlock long-term finance although large-scale support from the government remains critical (loan guarantees, interest subsidies, land right formalization and strengthening of smallholder organizations)

• Support to financial services providers to understand, assess and manage smallholder-related risks

• Continued smallholders’ technical assistance and graduation
“Current practices and innovations in smallholder palm oil finance in Indonesia and Malaysia: Long-term financing solutions to promote sustainable supply chains”


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