ISSUES AND CHALLENGES WITH OIL PALM CULTIVATION AND DEVELOPMENT FOR SMALL HOLDERS

ASIAN PALM OIL CONFERENCE 2015
SURAT THANI 20TH - 21ST AUGUST
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1. INDUSTRY BACKGROUND

- There were 3 types of groups in the oil palm industry
  
  i. Small holders and independent growers – individually owned between 10 to 20 rai
  
  ii. Cooperatives and self help land settlement growers – mostly own about 30 rai.
  
  iii. Private sector plantations – operated bigger areas than the above

- Third biggest world producer
  
  i. In 2014 produced about 1.7M tons of CPO – 3.05% of world palm oil production
  
  ii. With an estimated mature areas of 4.3M rai producing 11.3M tons of FFB
  
  iii. Due to demand for bio diesel – industry is aggressively promoting oil palm cultivation

- Yield performance
  
  i. Low FFB yield performance – avg. 16 to 17 t/ha
  
  ii. Low OER from processing – avg. 16% to 17%
OIL PALM PLANTATION AREAS BY REGIONS IN THAILAND

**Thailand OP Planted Areas**

<table>
<thead>
<tr>
<th>Region</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern</td>
<td>3535642</td>
<td>3580909</td>
<td>3666133</td>
</tr>
<tr>
<td>Central</td>
<td>446532</td>
<td>490816</td>
<td>517496</td>
</tr>
<tr>
<td>North eastern</td>
<td>75032</td>
<td>78396</td>
<td>102778</td>
</tr>
<tr>
<td>Northern</td>
<td>19677</td>
<td>25445</td>
<td>29318</td>
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</tbody>
</table>

Area in Rai
• Thailand has a higher proportion of small holders than Indonesia and Malaysia. The average size of landholding in Thailand of large scale and smallholder in 2007 was 796 ha (4,975 rai) and 3.89 ha (24.31 rai) respectively.
2. GOVERNMENT POLICY ON OIL PALM

Renewable energy policy and targets

i. By 2021, production target policy set at 5.97 milliliter per day


iii. Alternative sources of bio diesel stock and security – reduce dependency on fossil fuel and imports – low carbon emission targets
2. GOVERNMENT POLICY ON OIL PALM

- Incentives and subsidies to convert to oil palm
  
  i. Increase oil palm area and production trends – in 2013 plantation area had increased to approximately 4.5 million Rai (720,000 ha)

  ii. In 2011 – Average OER targets of 18.5% and FFB yield of 21 t/ha (3.36 t/rai)
2. GOVERNMENT POLICY ON OIL PALM

- Incentives and subsidies to convert to oil palm
- Domestic oil palm consumption and export
- Food security for domestic consumption – policy and considerations
- Community wealth development – government subsidy for small holders – improve income through good agricultural practices

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginning Stock (1)</th>
<th>Production (2)</th>
<th>Import (3)</th>
<th>TOTAL (4)</th>
<th>EXPORT (5)</th>
<th>Domestic Consumption (6)</th>
<th>Biodiesel</th>
<th>Ending Stock (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>88,916</td>
<td>1,543,761</td>
<td>28,385</td>
<td>1,661,062</td>
<td>288,054</td>
<td>989,061</td>
<td>276,000</td>
<td>107,947</td>
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<tr>
<td>2009</td>
<td>107,947</td>
<td>1,387,604</td>
<td></td>
<td>1,495,551</td>
<td>67,292</td>
<td>910,700</td>
<td>380,000</td>
<td>137,559</td>
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<tr>
<td>2010</td>
<td>137,559</td>
<td>1,287,509</td>
<td></td>
<td>1,425,068</td>
<td>65,942</td>
<td>911,339</td>
<td>380,000</td>
<td>67,787</td>
</tr>
<tr>
<td>2011</td>
<td>67,787</td>
<td>1,832,151</td>
<td>59,793</td>
<td>1,959,731</td>
<td>388,939</td>
<td>896,464</td>
<td>376,742</td>
<td>297,586</td>
</tr>
<tr>
<td>2012*</td>
<td>297,586</td>
<td>1,925,532</td>
<td>40,056</td>
<td>2,263,174</td>
<td>300,000</td>
<td>1,000,000</td>
<td>607,111</td>
<td>356,063</td>
</tr>
<tr>
<td>2013*</td>
<td>356,063</td>
<td>2,042,698</td>
<td></td>
<td>2,398,761</td>
<td>300,000</td>
<td>1,000,000</td>
<td>610,000</td>
<td>488,761</td>
</tr>
</tbody>
</table>

Remark: * Amount of CPO in 2012 & 2013 are estimates from the Office of Agriculture Economics
Data Source: (1), (2), (6),(7) from Department Of Internal Trade
(3), (5) from Customs Department
(5) Adjustment to balance
Source: Office Of Agriculture Economics (2013)
3. CURRENT STATUS ON OIL PALM

- At the same period, a trend of oil extraction rates (OER) in Thailand has been declining. The average OER in the period from 2005 to 2009 was only 16.6%. If the average OER of 18.8% from 1990 to 1994 had been achieved in 2009, an additional 146,923 tons of CPO would have been produced.

- The value is THB3,366 million or USD102 million. Potential OER rely on good management practices. Malaysia and Indonesia achieve OER of up to 25% under optimum conditions.

- Various factors such as palms from low quality planting material (seeds), FFB delivery, and the utilization oil mill capacity are the cause of the lower potential OER.

If yield were to increase by 2.5 t/ha, an additional FFB production of 1,276 million tons and CPO production of 217,016 tons would have been produced with a value of THB 4,972 million or USD151 million.
4. ISSUES AND CHALLENGES

- Smallholders Income
  i. New planting and quality seedlings – nursery development – quality seeds
  ii. Seedlings supply from nursery operators without quality assurance – defective seedling – long term impact to smallholders
  iii. Improvement in yield and OER – knowledge and understanding of crop quality
  iv. Value added from replanting – rubber wood for biomass fuel stock

- Smallholders Crop Sale And Delivery
  i. Crops sold through intermediaries – with good bargaining positions and make decisions which mill to sell offering better price
  ii. Crop quality not regulated – no differentiation between fresh crops under ripe and overripe crop
  iii. Crop contaminations – purely up to intermediaries decision – affect smallholders income and adverse impact to the mill operations

<table>
<thead>
<tr>
<th>Country</th>
<th>Planted Area (ha)*</th>
<th>GNP (USD) **</th>
<th>% of population below poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia</td>
<td>5,100,000</td>
<td>10,304</td>
<td>3.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>890,000</td>
<td>5,678</td>
<td>7.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>10,500,000</td>
<td>3,592</td>
<td>13.2</td>
</tr>
<tr>
<td>Philippines</td>
<td>73,210</td>
<td>2,614</td>
<td>25</td>
</tr>
</tbody>
</table>

*Data by MPOB
** Asean Elusive Integration: Philippine Daily Inquirer; 4May2014 p16
4. ISSUES AND CHALLENGES

- Introduction of regulatory measures
  
  i. Imperative to formulate regulation and guidelines for smallholders to comply in ensuring good agricultural practices resulting in quality crop harvested and delivered to the oil mill.

  ii. Crop purchase by intermediaries must be well regulated to prevent unfair pricing manipulations and fixations.

  iii. Establishment of FFB crop quality standards and guidelines must be implemented and disseminated respectively to all stakeholders in the industry – through community leaders and district agricultural agencies.

- Distribution of incentives and subsidies

  i. Small holders within permitted zone for OP development and replanting programmes – to provide subsidies for seedlings and fertilizers from licensed importers, nursery operators and approved traders.

  ii. Mechanism for effective distribution of subsidies – via current establishment.

  iii. Concerted effort and support from farmers council, cooperatives, district agricultural agencies and provincial administration.
4. ISSUES AND CHALLENGES

- Knowledge and training in oil palm cultivation
  
  i. Smallholders and farmers lack of knowledge – on cultivation, good agriculture practices, fertilizer recommendation, crop protection, water management
  
  ii. Adoption of modern farming technology and mechanisation for productivity and efficiency – improve crop quality
  
  iii. Agronomy support from relevant extension services internal and external
  
  iv. Understanding and implementing sustainability practices
5. MOVING FORWARD WITH THH VENTURES

- **Our role and mission**
  - A strategic private initiative with local business partner
  - Consortium of advisors and experts in oil palm cultivation and oil palm milling
  - Support authority with regulatory developments

- **Our approach to sustainable development**
  - From seeds, nursery operation, cultivation and milling
  - Malaysian expertise and advisory extension to support industry
  - Palm waste for renewable energy and fuel stocks to support alternative energy development.

- **Supporting the needs of small holders**
  - Skills training and providing knowledge to small holders community - all aspects of oil palm cultivation and related technology
  - Improvement on household income through sustainable agriculture good practices
5. MOVING FORWARD WITH THH VENTURES

- Business model for small holders community
  - Licensed supplier of seeds from reputable origin are only allowed and permitted to supply to licensed nurseries – quality assurance system must be established
  - Establishment of proper nursery practices and management – meet established regulatory requirements – seedlings from nurseries must at least 10 months old
  - FFB crop sale only to licensed collection centres with knowledge and understanding of quality requirements and specification for mills
  - Crop will be processed by appointed mills which are set up to support the smallholders community within the area/zones
  - Mills are obligated to purchase FFB from smallholders through a mutual agreement prior to setting up of mill – with FFB price structure and pre-set quality incentives

- Palm Oil Mill Development
  - Investment for the mill development – economics of scale within zone areas for better mill operational efficiency – contributing to better OER
  - Strategic locations for logistical advantage and crop quality assurances
  - Oil palm waste management – potential for biogas and EFB fuel pallets for power generation to support AEDP
6. CONCLUSION

The Thai oil palm industry will grow into a respected world palm oil producer provided that all the stakeholders play their role with the recommendations as follows:

- Imperative for various regulatory measures are in place to drive the industry – generating economic wealth for the smallholders and assuring energy and food security for the nation economic development.

- Extensive agronomic extension services to be reached out to small holders – via provincial and government agencies – as well knowledge sharing.

- FFB crop pricing based on quality criteria established and dictated by relevant agencies or authorities in the industry – driven by established policy and set targets such as by the Thai Oil Palm Board and DOA.

- Palm Oil Mill and smallholders must be encouraged to have a supply and purchase agreement through organisation such as Farmers Council and Cooperatives to safeguard smallholders interest.
Thank You For Your Attention

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