SUSTAINABILITY OF THE MALAYSIAN OIL PALM INDUSTRY

By:
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Wednesday, 23rd August 2017
Le Meridien, Putrajaya
1) Introduction
2) Social Development of the People
3) Well Being of Native Communities
4) Conservation and Management of the Environment & MSPO
5) Economic Development for Progress of the Nation
6) R&D Activities
7) Conclusion
1. Introduction

Sustainability Issues and Challenges:

• Commitment towards sustainability
• Legal requirement
• Yield
• Cost of production
• Labor
• Quality
• Food Safety
1. Introduction

Allegation from NGOs

- Deforestation
- Decline in biodiversity
- Loss of ecological function
- Rights of indigenous people
Oil palm – big role in poverty eradication

• Employment  >500,000 people
• Provide >100,000 rural landless farmers with land
  • FELDA
  • FELCRA
3. Well-being of Native Communities

Clear recognition of indigenous and Native Customary Rights (NCR) over land:

- Federal Constitution
- Sabah Land Ordinance
- Sarawak Land Code

Development of the aborigines (Orang Asli)

- Department of Orang Asli Development (JAKOA)
4. Conservation and Management of the Environment

4.1 MPOB Codes of Practice (CoP)

Objective: Food Safety, Quality & Sustainability

Scope:

1. Nurseries
2. Smallholdings and estates
3. Mills
4. Palm kernel crushers
5. Refineries
6. Transportation
4. Conservation and Management of the Environment

4.1 MPOB Codes of Practice (CoP)

Focus:

1. Best practices
2. Safe usage of pesticide
3. High quality seedlings
4. Safety of workers
5. Environmental protection
6. Legal requirements
4. Conservation and Management of the Environment

4.1 MPOB Codes of Practice (CoP)

Current Status for CoP Certification (Jun 2016):

- Nursery: 235
- Smallholdings and Estates: 160 (365,000Ha)
- Mill: 38
- PKC: 9
- Refinery: 14
- Bulking: 2
4.2 Manual for Sustainable Production of Palm Oil

Malaysian Oil Palm Sustainability Manual, 2015

- Captures the general procedures, principles and criteria underlying sustainability practices
- Specific emphasis on the requirements for sustainability
4.3 Malaysian Sustainable Palm Oil (MSPO)

**MSPO Standards**
- Endorsed on 5\textsuperscript{th} Sept. 2013
- Launched on 19\textsuperscript{th} Nov. 2013

**MSPO Certification Scheme**
- Voluntary from 1\textsuperscript{st} Jan. 2015
- Mandatory from 31\textsuperscript{st} Dec. 2019
4.3 Malaysian Sustainable Palm Oil (MSPO)

3 stages for mandatory MSPO:

- **Stage 1**: 31st Dec. 2018 – Estates and Mills with RSPO
- **Stage 2**: 30th June 2019 – Estates and Mills without RSPO
- **Stage 3**: 31st Dec. 2019 – Smallholders
<table>
<thead>
<tr>
<th>No.</th>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MS 2530-1:2013</td>
<td>Malaysian Sustainable Palm Oil (MSPO) Part 1: General principles</td>
</tr>
<tr>
<td>2</td>
<td>MS 2530-2:2013</td>
<td>Malaysian Sustainable Palm Oil (MSPO) Part 2: General principles for independent smallholders</td>
</tr>
<tr>
<td>3</td>
<td>MS 2530-3:2013</td>
<td>Malaysian Sustainable Palm Oil (MSPO) Part 3: General principles for oil palm plantations and organised smallholders</td>
</tr>
<tr>
<td>4</td>
<td>MS 253- 4:2013</td>
<td>Malaysian Sustainable Palm Oil (MSPO) Part 4: General principles for palm oil mills</td>
</tr>
</tbody>
</table>
MSPO principles and criteria vary depending on the sector – independent smallholders, organized smallholders, plantations and mills.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Title</th>
<th>Criteria</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSPO Part 1</td>
<td>General principles</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>MSPO Part 2</td>
<td>General principles for independent smallholders</td>
<td>23</td>
<td>35</td>
</tr>
<tr>
<td>MSPO Part 3</td>
<td>General principles for oil palm plantations and organized smallholders</td>
<td>33</td>
<td>117</td>
</tr>
<tr>
<td>MSPO Part 4</td>
<td>General principles for palm oil mills</td>
<td>26</td>
<td>87</td>
</tr>
</tbody>
</table>
MSPO Seven Principles

Principle 1 : Management commitment and responsibilities
Principle 2 : Transparency
Principle 3 : Legal requirements
Principle 4 : Social responsibility, health, safety and employment conditions
Principle 5 : Environment, natural resources, biodiversity and ecosystem
Principle 6 : Best practices
Principle 7 : Development of new planting
**Achievements of MSPO Certification (Until June 2017)**

**MSPO Certified Estates**
- Number Estates: 75
- Area: 237,509.39 Ha

**MSPO Certified Mills**
- Number mills: 22
- FFB Processing Capacity: 1,467 Mt/hr

**MSPO certified smallholders**
- Number Groups: 20
- Area: 7,822.36 Ha
4. Conservation and Management of the Environment

4.4 Conservation Effort by OP Industry

AN OVERVIEW OF FOREST CHANGES

Forest Fragmentation in Peninsular Malaysia

- A result of logging activities, agricultural, infrastructural development i.e. road and highways, etc.
- Identified as a threat to the conservation of forest biodiversity — loss of habitat and wildlife including mammals

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</tr>
</thead>
<tbody>
<tr>
<td>Hectares</td>
<td>9.5 juta</td>
<td>8.0 juta</td>
<td>7.4 juta</td>
<td>6.2 juta</td>
<td>6.0 juta</td>
</tr>
</tbody>
</table>

CENTRAL FOREST SPINE (CFS)

- A national initiative – to link up 4 major forest complexes in Peninsular Malaysia with a network of ecological or green corridors to create one contiguous, forested wildlife sanctuary.

- To cover a total of 5.3 million hectares – ~40% of the area of Peninsular Malaysia (80% of it designated as Permanent Forest Reserve).

- Aims to conserve and rehabilitate small forest fragments and increase their connectivity with the main forest.

- Efforts to protect biodiversity and habitats will be strengthened.

- Crucial in creating ecological connectivity for Peninsular Malaysia and will ensure species survival.
HEART OF BORNEO (HoB)

- Borneo - world's third largest island; 1% of the world's land yet holds approximately 6% of global biodiversity in its rich, tropical forests.

- Critical role for securing water services and carbon stock, water catchment, preserving biodiversity, ecosystem connectivity and building resilience to climate change for sustainable development of Borneo and wellbeing of its people.

- Declaration signed by 3 countries (Malaysia, Indonesia & Brunei) initiative and cooperation on February 12, 2007 in Bali, Indonesia.

- Approximately 200,000 km² of ecologically connected forest across three countries, in which about 60,000 km² of the area is within Malaysia (Sabah & Sarawak).
• Aims to conserve the biodiversity of the Heart of Borneo for the benefit of the people who rely upon it through a network of protected areas, sustainable management of forests and other sustainable land uses.

• Three key elements of focus:
  • People welfare
  • Biodiversity conservation
  • Protection of environment

*Three Countries, One Conservation Vision*
NATIONAL POLICY ON BIOLOGICAL DIVERSITY

- The first National Policy On Biological Diversity was formulated in 1998.

- Revised policy will be used as guide to biodiversity management over the next 10 years (2016 – 2025).

- Provides the direction and framework in conserving the nation's biodiversity and use it sustainably in the face of increasing challenges.

- This revised policy complements Malaysia’s obligations under the United Nations Convention on Biological Diversity (CBD) and to implementing the Sustainable Development Goals (SDG).
MALAYSIAN PALM OIL WILDLIFE CONSERVATION FUND (MPOWCF)

- Launched in 2006 - an initial funding of RM20 million of which RM10 million is a grant from the Malaysian government and the balance of RM10 million is provided by the palm oil industry.

- Serves as help to portray the good image of Malaysian palm oil by providing concrete assurances and provides funds for studies on wildlife, biodiversity and environmental conservation.
<table>
<thead>
<tr>
<th>NO</th>
<th>PROJECT</th>
<th>PARTNER</th>
<th>PURPOSE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jungle Patrol Unit</td>
<td>Sabah Forestry Department</td>
<td>Safeguard wildlife and deter poaching</td>
<td>2007-ongoing</td>
</tr>
<tr>
<td>3</td>
<td>Diversity of Ground Vegetation</td>
<td>Sabah Forestry Dept</td>
<td>Study in oil palm plantation</td>
<td>2007</td>
</tr>
<tr>
<td>4</td>
<td>Biodiversity conservation on ox-bow lake study</td>
<td>Universiti Malaysia Sabah</td>
<td>Inventory and environmental assessments</td>
<td>2007</td>
</tr>
<tr>
<td>5</td>
<td>Orang Utan Island</td>
<td>MK Land</td>
<td>• Orang Utan Infant care&lt;br&gt;• Orang Utan awareness programme for school children</td>
<td>2007-2009</td>
</tr>
<tr>
<td>6</td>
<td>Orang Utan Survey</td>
<td>Borneo Conservation Trust (BCT), Sabah</td>
<td>Assess population &amp; recommend solutions to increase population of orangutan</td>
<td>2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wildlife Department (SWD) &amp; HUTAN (NGO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Orang Utan Conservation Colloquium (OUCC 2009)</td>
<td>BCT, SWD, HUTAN</td>
<td>• Discuss current status of orangutan within oil palm landscapes&lt;br&gt;• Discuss models for orangutan conservation</td>
<td>2009</td>
</tr>
<tr>
<td>8</td>
<td>Biodiversity for Plantation Managers</td>
<td>Wild Asia</td>
<td>Awareness on biodiversity and wildlife conservation</td>
<td>2010</td>
</tr>
<tr>
<td>9</td>
<td>Wildlife Rescue Centre</td>
<td>Sabah Wildlife Dept/ShangriLa Rasa Ria</td>
<td>Rescue &amp; translocation of endangered wildlife found in oil palm landscapes</td>
<td>2010-ongoing</td>
</tr>
<tr>
<td>NO</td>
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<td>PURPOSE</td>
<td>STATUS</td>
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</tr>
<tr>
<td>10</td>
<td>Sabah Wildlife Conservation Colloquium 2012</td>
<td>Sabah Wildlife Department</td>
<td>Shared/highlighted conservation efforts and studies, with a focus on endangered species in Borneo, Malaysia.</td>
<td>2012</td>
</tr>
<tr>
<td>12</td>
<td>The Borneo Elephant Sanctuary</td>
<td>Sabah Wildlife Department</td>
<td>To be the centre of conservation efforts for the Bornean elephant which includes elephant rescue, treatment and a holding area for wild displaced elephants.</td>
<td>2012 – current</td>
</tr>
<tr>
<td>13</td>
<td>Rescue and translocation of orangutan trapped within oil palm plantation landscapes to permanent forest reserves</td>
<td>Sabah Wildlife Department</td>
<td>The rescue and translocation of orang utans in Sabah and provided the rescued animals with proper shelter and medical care until relocation to a selected permanent forest reserve/wildlife sanctuary</td>
<td>2013 – current</td>
</tr>
<tr>
<td>14</td>
<td>Orang Utan Conservation Programme in Sarawak</td>
<td>Sarawak Forestry Corporation</td>
<td>To undertake Orang Utan conservation efforts in protected areas in Sarawak, such as the Ulu Sebuyau National Park and the Sedilu National Park</td>
<td>2014 - current</td>
</tr>
<tr>
<td>15</td>
<td>Funding of Tiger Cataract Operation</td>
<td>National Wildlife Rescue Centre (NWRC)</td>
<td>Funding for the eye operation of two (2) tigers with eyesight conditions</td>
<td>2016</td>
</tr>
<tr>
<td>16</td>
<td>Tiger Conservation Program in collaboration with Perhilitan (Preceding known as “Adopt the Tiger Program”)</td>
<td>PERHILITAN</td>
<td>To reintroduce the tiger back into their natural habitat and eventually to increase the population number in achieving National Tiger Conservation Action Plan’s goal which is to double the tiger population by the year 2022.</td>
<td>2017</td>
</tr>
</tbody>
</table>
The New Economic Model has identified the right framework to drive Malaysia to achieve high income nation.

- **High Income**: Target USD 15,000-20,000 per capita by 2020
- **Inclusiveness**: Enables all community benefits from the wealth of the country
- **Sustainability**: Meets present needs without compromising future generations
Increasing productivity per unit area

Palm Oil - National Key Economic Areas (NKEA)

EPP1 : Accelerating replanting and new planting
EPP2 : Improving FFB
EPP3 : Improving workers productivity
EPP4 : Increase OER
EPP5 : Development of biogas plant
EPP6 : Developing oleo derivatives
EPP7 : Commercializing 1\textsuperscript{st} and 2\textsuperscript{nd} generation biofuel
EPP8 : Expedite growth in food and health-based downstream
6. R&D Activities

**Conventional breeding**
- DxP (6t/ha/yr)
- Clones (8-12t/ha/yr)

**Oil palm genome**
- Comprehensive genetic blueprint of oil palm

**Genetic modification**
- Palms with high oleic and ganoderma resistance
- Currently no GM for commercial planting
Integrated Pest Management (IPM)

- Beneficial plant
- Bacterium (*bacillus thuringinesis*)
- Barn owl
- Fungus (*metarhizium anisopliae*)
6. R&D Activities

Oil palm cultivation on peat

- Tropical Peat Research Institute (TROPI)
  - Facilitating research study on tropical peat
  - GHG emissions study
  - Carbon flux study
Milling

- Towards installation of zero waste and zero emissions systems
- Biogas capture
6. R&D Activities

Biofuels

- 1st and 2nd generation biofuel
- Blend of palm biodiesel with petroleum diesel
Malaysian oil palm industry committed towards sustainable development

Continuous improvement through R&D will always remain a key feature of Malaysia’s efforts in the production of sustainable palm oil

Mandatory implementation of MSPO certification by 31st December 2019 will brand the sustainable Malaysian palm oil.
TREASURING THE PAST
CHARTING THE FUTURE

PIPOC 2017

14-16 NOVEMBER 2017
Kuala Lumpur Convention Centre,
Kuala Lumpur, Malaysia

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