Palm Oil and Land Use Change Rest of World (ROW)

Presented by Timothy Killeen

RSPO RT9: GHG Cluster Session
Kota Kinabalu, 22 November 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>FAOSTAT (MTX1000)</th>
<th>Yield (estimate)</th>
<th>Area under cultivation (X 1000 ha)</th>
<th>small-holders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>1,380</td>
<td>0.8</td>
<td>50 (-&gt;1000)</td>
<td>80%</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,310</td>
<td>2.1</td>
<td>628</td>
<td>75%</td>
</tr>
<tr>
<td>Colombia</td>
<td>802</td>
<td>2.3</td>
<td>350</td>
<td>*</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>470</td>
<td>3.6</td>
<td>150</td>
<td>25%</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>325</td>
<td>1.7</td>
<td>100 (-&gt; 300)</td>
<td>70%</td>
</tr>
<tr>
<td>Ecuador</td>
<td>321</td>
<td>1.6</td>
<td>200</td>
<td>*</td>
</tr>
<tr>
<td>Honduras</td>
<td>290</td>
<td>3.0</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Brazil</td>
<td>265</td>
<td>3.0</td>
<td>85</td>
<td>25%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>191</td>
<td>4.7</td>
<td>41</td>
<td>26%</td>
</tr>
<tr>
<td>DRC (Congo)</td>
<td>185</td>
<td>0.8</td>
<td>10 (-&gt; 200)</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>182</td>
<td>0.8</td>
<td>?</td>
<td>&gt; 80%</td>
</tr>
<tr>
<td>Guatemala</td>
<td>180</td>
<td>3.0 (5)</td>
<td>45</td>
<td>*</td>
</tr>
<tr>
<td>Ghana</td>
<td>130</td>
<td>1.7</td>
<td>50</td>
<td>80%</td>
</tr>
</tbody>
</table>
Africa

**Ivory Coast**
- Industrial plantation
- Mixed agroforestry
- Organized smallholder
- \(~191,000\) Mt
- 70% smallholders

Africa

**Nigeria**
- Industrial plantation
- Mature landscapes with agroforestry (scattered palms)
- 50,000 \(\rightarrow\) 1.2 M ha
- 80% smallholders
Africa
Nigeria
State forest lands
DRC
Potential Expansion

Central America
Honduras (Caribbean)
Guatemala (Pacific Coast)
Industrial Palm & Sugar cane
Out-growers (medium sized)
Smallholder communities
Mature landscapes
South America

Colombia
Andean Piedmont
Llanos del Orinoco
(natural savannas)
Low biomass but HCV

South America

Colombia
Magdalena River Valley
Atlantic Coastal Plain
Mature landscapes
low biomass
HCV : wetlands
Brazil - Bahia State
Dendé introduced in 16th Century
Plantations; 10,000 ha
Smallholders: 20,000

Brazil
Para State
Plantation (40,000 ha)
Out Growers (8,000 ha)
Smallholders (2000 ha)
Forest Law 4:1 ratio
PNG
3 plantation clusters
Reported: 150,000
Landsat: 133,000
Smallholders
~ 30% production
~13% of area not detected by satellite

Thailand
Smallholders
Mixed agroforestry
Rubber, rice, aquaculture
Conclusions (LUC in ROW)

Most industrial plantations are legacies of previous investment cycles (decades old)

Occupy mature landscapes surrounded by small to medium sized farmers

Expansion of industrial plantations will be problematic, but potential for smallholder initiatives are massive