Forest plantation industry can contribute to conservation?

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WWF Indonesia
Forest Loss in Sumatra 1900-2010 (Worldbank, 2001)

Hectares (million)

- Montane
- Swamp
- Lowland

Forest cover for 2000 derived from satellite images, all others are estimates.
Forest loss in Riau (on peat and non-peat)

- Relatively more non-peat forests were cleared
- Relatively more peat forests were cleared
Pulp industry is a driver?

- Pulp production capacity: 4,200,000 tons
- 2005: (assuming) 70% fiber supply comes from mixed tropical hardwood = 167,847 hectares*
- 2004-2005: satellite image analysis showed forest loss of 200,000 hectares

*) Forest to pulp conversion based on AMEC data: 4.2 m tons of total pulp production x 4.5 (wood to pulp ratio) x 1.13 (wood ton to m3 ratio) x 70% (share of MTH among the total wood supply) x 1.235 (adding 23.5% harvest & transport yield losses) / 110 (average timber standing volume per hectare of natural forest) = 167,847 hectares per year.
Impacts on human-wildlife conflicts

Blok Hutan Senepis
Blok Hutan Libo
Blok Hutan Giam Siak Kecil
Blok Hutan Kampar
Blok Hutan Kerumutan
Blok Hutan Bukit Tigapuluh
Blok Hutan Rimbang Baling
Habis tahun 2002
Habis tahun 1999
Habis tahun 2003

Blok Hutan Tesso Nilo
Blok Hutan Senepis
Konsesi Perkebunan
Konflik Gajah dandan Manusia
Habis tahun 2003
Habis tahun 1999

8 Blok Hutan didi Riau
Dan Dan Jalurnya

Impacts on human-wildlife conflicts
Victims of both sides

Elephant populations

<table>
<thead>
<tr>
<th>Year</th>
<th>Size</th>
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</thead>
<tbody>
<tr>
<td>1985</td>
<td>1067-1617</td>
</tr>
<tr>
<td>1999</td>
<td>709</td>
</tr>
<tr>
<td>2003</td>
<td>353-431</td>
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</tbody>
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Estimates of financial loss in palm oil sector:
ca US$ 100,000,000 a year
Impacts on forest fires

* NOAA Satellite

Hot Spot
- 2006

* MODIS Rapid Response

0° Equator

102° East

Malaysia

Sumatra

Singapore
Impacts on fires

Hotspot in peak months

¼ of hot spots in 2005 and 2006 were in timber plantation concessions
Can we move forward?
While maintaining profit, help eradicating poverty and conserving biodiversity?
YES

• Adopt sustainable forest management by
  – Enrolling in forest certification (robust CoC)
  – Protecting HCVF (high conservation value forest)
  – Expanding financially attractive community forestry scheme
  – Gaining support from buyers and government (incentive policies)

• Adopt responsible procurement and investment screening policies
Protect remaining 8 HCVF blocks: timber plantations can serve as buffer zone.
Land Use Planning

Improved:
no oil palm next to forest

Tesso Landscape Vision 2015

existing acacia concessions completed outside of high conservation value forests

human elephant conflict reduced

recently cleared areas
opened forest
closed forest
grass, shrub
short-term crops
mixed tree garden
rice fields
oil palm plantation
rubber plantation
acacia plantation
settlements
water bodies