



Hutan Tanaman Dikelola Intensif di Indonesia: Tinjauan Tren Terkini dan Rencana Terbaru

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Kerangka Presentasi

- Tinjauan krisis hutan Indonesia
- Rencana Perkebunan Departemen Kehutanan 9 juta ha
- Program HTI Indonesia
 - Pencapaian
 - Pelajaran
- Pengembangan perkebunan kayu pulp di Riau
- Tinjauan program Hutan Tanaman Rakyat
- Pengalaman Indonesia dengan skema outgrower dan nucleus estates
- Ringkasan dan rekomendasi



Krisis hutan Indonesia

- Deforestasi diperkirakan 1,6 – 2,0 juta ha/th, dengan angka sama degradasi hutan
- Illegal logging meluas
- Banyak perusahaan kayu menebang pada tingkat tidak lestari
- Taman dan kawasan lindung diancam perambahan hebat
- Kawasan besar hutan dikonversi menjadi kelapa sawit, biofuels
- Pemerintah pusat dan daerah dalam konflik



Pasokan legal kayu dari hutan alam semakin berkurang

- Sejak akhir-1960-an, Departemen Kehutanan telah menerbitkan has issued > 60 juta ha izin HPH, untuk izin selektif dengan rotasi 35 th
- Namun produksi log HPH dengan cepat berkurang terutama di Sumatera dan Kalimantan, sebagaimana konsesi menurun



- Pasok legal saat ini sekitar 22 juta m³/th – kebanyakan dari hutan alam
- Jumlah ini 40% atau sedikit dari permintaan kayu log domestik
- Keseimbangan dari sumber ilegal
- Sektor kehutanan industri menghadapi kekurangan jika revitalisasi tidak dimulai



Rencana perkebunan 9 juta ha Dephut

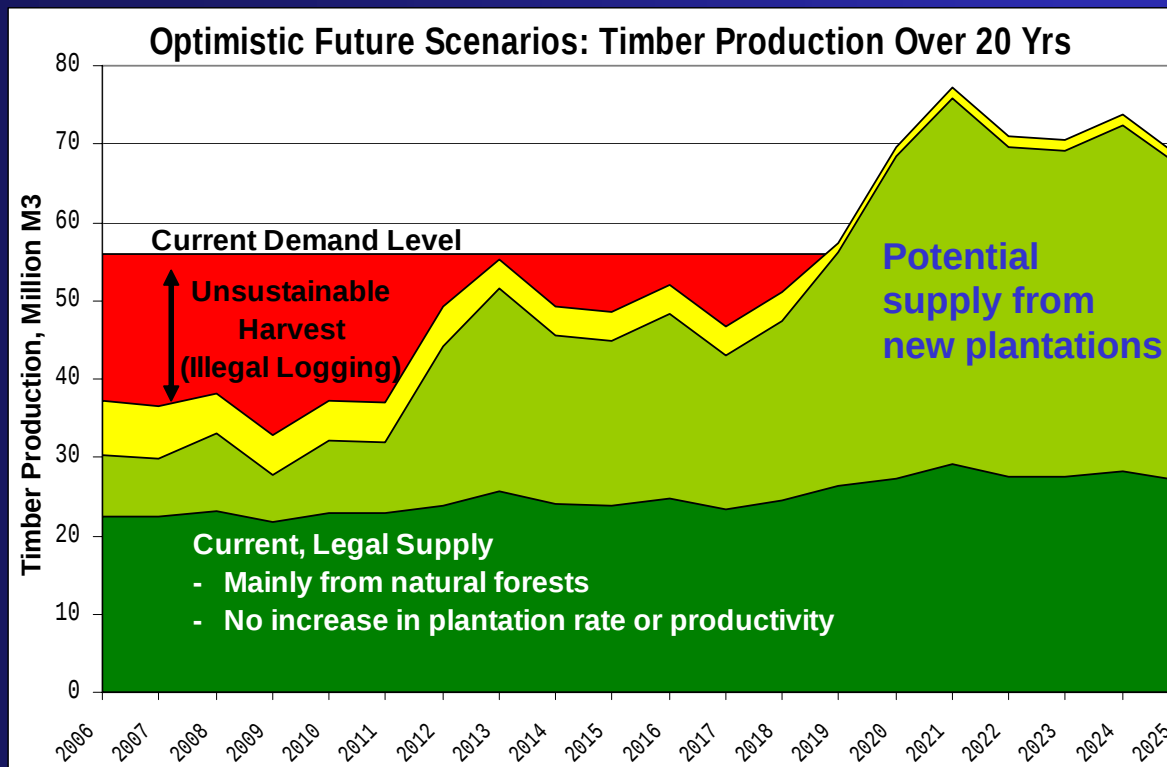
- Pada Desember 2006, Dephut mengumumkan target mewujudkan 9 juta ha (gross) perkebunan bagi kayu industri hingga 2016 – menyatu dengan proses revitalisasi sektor hutan yang lebih luas
- 40 % total kawasan (3,6 juta ha) akan jadi perkebunan skala besar
- 60 % total kawasan (5,4 juta ha) akan dikelola oleh small-holders
- Dana dari Dana Reboisasi akan dialokasikan melalui badan keuangan negara yang baru
- Sekitar 8 miliar dolar AS akan diinvestasikan dari





Keuntungan potensial penting....

- Jika target-target dipenuhi, perluasan perkebunan bisa menyeimbangkan gap suplai-permintaan saat ini – dan bahkan memberikan surplus pada tingkat produksi sedang



- Perkebunan small-holder diharapkan memberikan kesempatan penghidupan bagi 360.000 rumah tangga Lapangan kerja langsung dan tidak langsung diharapkan bagi jumlah besar orang desa miskin

Source: T. Brown et al. (2005)

.... jadi tantangan dan resiko adalah

- Mewujudkan 9 juta ha (gross) perkebunan yang layak secara komersial mendapat tantangan teknis, logistik dan administratif yang besar ...
- ... terutama dengan 5,4 juta ha yang akan dialokasikan bagi small-holders dengan blok 15 ha
 - Pengalaman lampau, di Indonesia dan dimanapun, membuat menunjukkan prakarsa ini bisa mendapatkan resiko baru bagi hutan dan masyarakat desa
 - Perlu dikaji ulang pelajaran potensial dari program perkebunan industri guna meninjau pelajaran potensial dari program perkebunan industri HTI Indonesia, skema outgrower dan



Program perkebunan HTI Indonesia



- Sejak akhir 1980-an, Dephut mengalokasikan konsesi perkebunan kepada perusahaan swasta dan negara
- Izin-izin dialokasikan bagi kawasan hutan 'marjinal' atau 'rusak' –yakni $< 20 \text{ m}^3/\text{ha}$ spesies komersial dengan dbh $> 30 \text{ cm}$
- Perusahaan dibolehkan menebangi hutan tersisa, dengan izin IPK
- Pemegang izin HTI kemudian diwajibkan menanam kembali dan mengelola perkebunan selama 35 tahun + panjang dari 1 rotasi
- Pendanaan disubsidi dari Dana Reboisasi Pemerintah



Kawasan perkebunan HTI dialokasikan

- Pada 2002, IUPHHK menggantikan izin HTI, dan durasi maksimal untuk konsesi perkebunan diperluas hingga 100 tahun
- Hingga Agustus 2006, 219 izin mencakup kawasan 9 juta ha telah diterbitkan atau ditunda
- Ini terkonsentrasi di:
 - Papua = 1,63 juta ha
 - Kalimantan Timur = 1,46 juta ha
 - Riau = 1,18 juta ha
 - Sumatra Selatan = 970.000 ha
 - Kalimantan Barat = 912.000 ha



Kawasan dilaporkan ditanam (net)

- Pada Oktober 2006, Departemen Kehutanan melaporkan total kawasan ditanam netto 2,8 juta ha
 - 1,8 juta ha untuk kayu pulp
 - 1,0 juta ha untuk kayu pertukangan
- Namun angka-angka itu haruslah diwaspadai, karena kawasan besar tak pernah sepenuhnya tersedia, telah dikelola secara buruk, atau have been poorly managed, or sudah banyak rusak
- Kawasan komersial netto agaknya jauh lebih kecil dibanding angka yang ditunjukkan



Perkebunan komersial dikelola intensif paling banyak adalah untuk pulp

- Selama 1990-an, 23 izin perkebunan kayu pulp dikeluarkan, mencakup 4,3 juta ha (gross); lebih banyak daripada setelahnya



Acacia mangium spesies utama pada tempat tanah kering

- Pertumbuhan pesat (rotasi 7 tahunan)
- Adaptabilitas pada tanah kritis
- Panen pulp tinggi

Acacia crassicarpa dominan pada lokasi gambut



Konversi hutan alam

- Banyak kawasan dialokasikan untuk pengembangan perkebunan HTI tertutup dengan hutan bernilai komersial(*secara teknis 'rusak'*)
- Ini mendorong pencari sewa, seperti perusahaan perkebunan yang pertama diizinkan menebangi kayu dengan royalti jauh di bawah nilai stumpage
 - Many HTI license-holders never replanted after clearing their concession area
 - To avoid further negative impacts on natural forests, greater care will be needed to prioritize sites that no longer have forest cover





Tenure conflict and displacement of forest communities

- In many cases, HTI licenses have overlapped with land or forests managed by local communities under customary tenure systems
- During the Suharto era, this often led to the displacement or relocation of local peoples
- In the post-Suharto era, tenure disputes and violent conflicts have become common, particularly as timber plantations tie up the land for long periods (now 100 years)





Financial fraud – misuse of the Reforestation Fund

- Through 1997-98, GoI allocated US\$ 417 million from the Reforestation Fund to finance plantation development, as cash grants and discounted loans



- Many recipients 'marked up' their costs or overstated the areas planted
- A 1999 Ernst & Young audit recorded losses of US\$ 223 million during 1993-98
- In 2006, ex-President Suharto's half-brother was convicted for fraudulent use of loans from the Reforestation Fund



Incentives for high-risk and/or unsustainable investments

- Access to HTI plantation concessions with large volumes of natural forest fiber that could be liquidated at low cost allowed Indonesian companies to secure funding for high-risk and unsustainable pulp mills



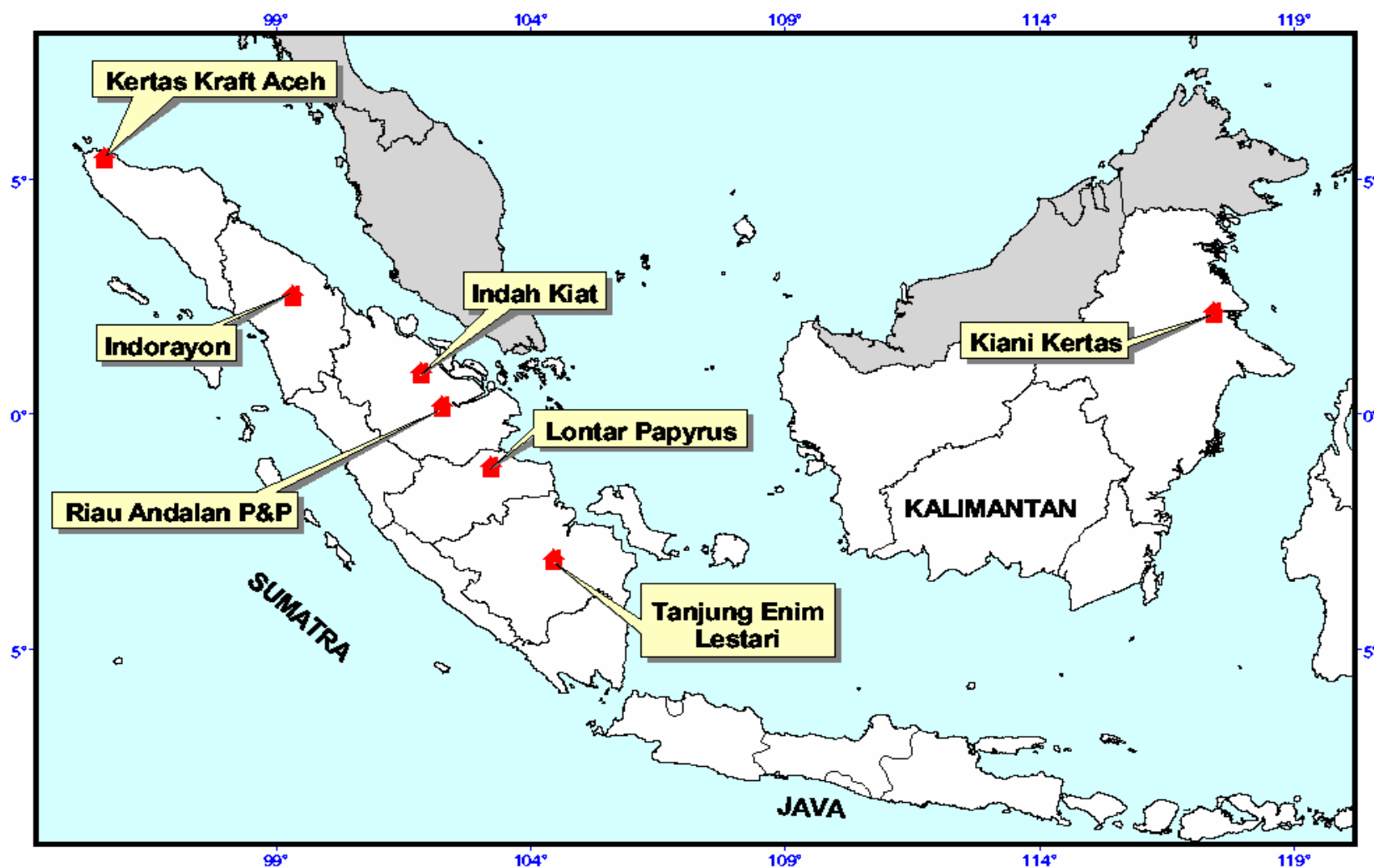
- Banks and ECA's routinely failed to conduct due diligence to determine whether borrowers could sustain such low-cost operations over the long-term
- Defaults of APP, APRIL, Kiani Kertas, Barito Group have meant the Government and private investors have absorbed substantial costs
- New regulations allow plantation license-holder to use forest assets as collateral for bank loans



Indonesia's pulp industry

- Rapid expansion of BHKP capacity since early-1990s, with Indonesia reaching 6.45 million Adt/yr in 2005
- Industry dominated by APP and APRIL, which control over 75 % of total pulp capacity – both linked to China
- 2005 BHKP production = 5.47 million Adt/yr (85 % capacity)
- 2005 pulpwood consumption = 25-27 million m³/yr
 - 70 % was 'mixed tropical hardwoods' (MTH) from natural forest
- Est'd 1.5 million ha of plantations (net), > 80 % *Acacia spp*
- New capacity expansion 'planned', including 1 greenfield BHKP mills

Kraft Pulp Mills in Indonesia





APP and APRIL mills in Riau

APP and APRIL have developed 2 of the world's largest pulp mills in Riau, each of which consumes 9-10 million m³/yr

- APP's Indah Kiat = 1.85 million Adt/yr (pulp)
- APRIL's RAPP mill = 2.0 million Adt/yr (pulp)

However, both groups have expanded pulp capacity much faster than plantation development

- Continue to rely heavily on MTH from natural forest
- Own plantation sites to supply only 50-60 % of fiber needed on a sustained basis

Both groups trying to secure large new JV areas for conversion to meet 2007 (APP) and 2009 (APRIL) 'sustainability' targets



APP's 'Sustainability Action Plan'

- In 2004, APP released a 'Sustainability Action Plan', detailing how it would meet its 2007 'sustainability target'



Key findings:

- As of 2003, net planted area: 121,179 ha (own HTI) and 34,000 ha (JV sites)
- Ambitious growth rates now revised downward:
 - MAI on mineral soils = 23.2 m³/ha/yr
 - MAI on peat soils = 19.6 m³/ha/yr
- Additional 252,828 ha (net) would be needed to sustain mill at 1.85 million Adt/yr



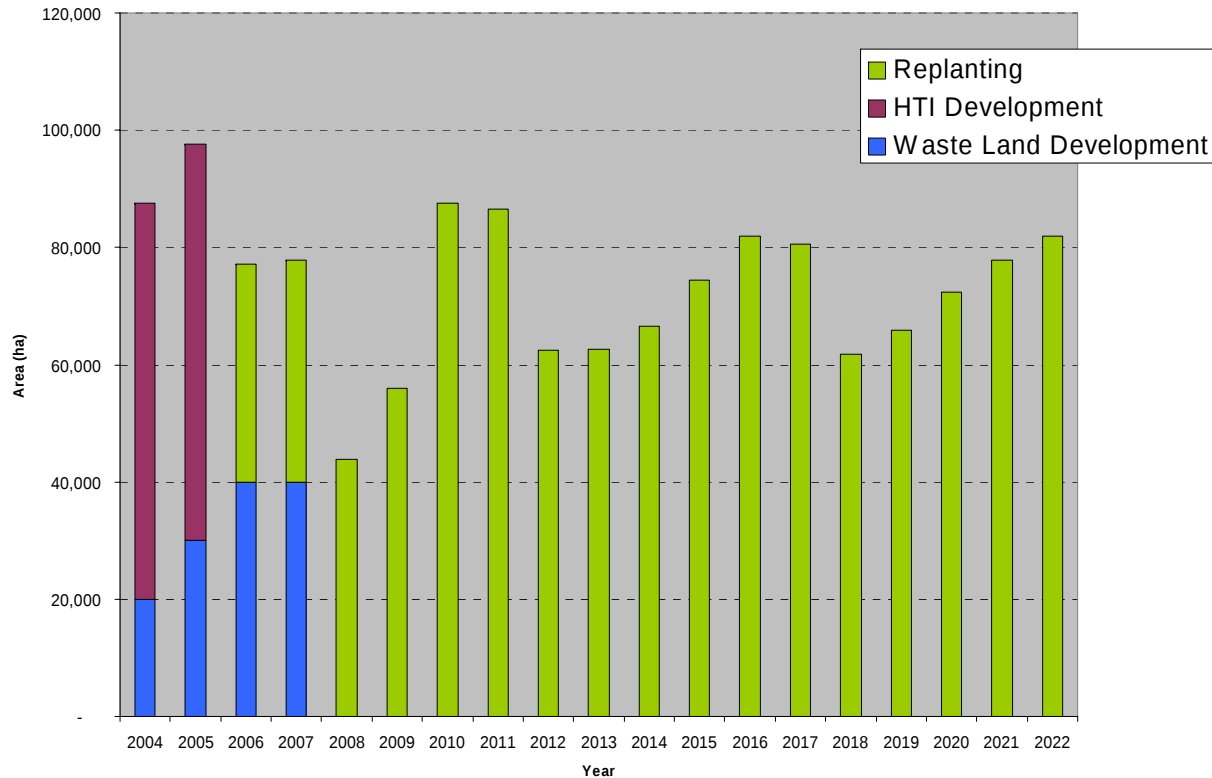
APP's plan for 2004-2007

- APP proposed to secure the additional 252,828 hectares of net plantation over 4 years (2004-2007)
- 72% of the new expansion (182,828 hectares) would occur in 2004 and 2005
- The areas targeted for plantation development consists of:
 - 122,828 hectares currently under peat swamp forest in Riau.
 - 30,000 ha is 'waste land' on mineral soil and peat swamp in Riau;
 - 100,000 ha are wet / swampy land in South Sumatra.
- Conversion of an additional 130,000 ha of natural forests is required



APP's sustainability plan for IKPP

Scenario 1: IKPP & JV plantations are harvested to provide an even flow of wood and are replanted immediately after



Annual planting targets:

2004: 85,000 ha (net)

2005: 98,000 ha (net)

Prior to this, APP had never planted more than 30,000 ha per year for IKPP.

Source: APP Sustainability Action Plan (2004)



APP's reported results

- In 2004, APP reportedly planted nearly 65,000 ha (net) to supply fiber to Indah Kiat, including:
 - 52,275 ha in Riau
 - 12,483 ha in Palembang (S. Sumatra)
- In 2005, APP reportedly planted 81,000 ha (net), including:
 - 46,182 ha in Riau
 - 35,426 ha in Palembang

Company sources indicated, however, that these a substantial portion of these areas are poorly stocked due to push to meet planting targets.

APP also reportedly suffered substantial plantation losses due to fire in 2004-05.

APP fiber supply – risks (1)

- Increasing reliance on peatland sites poses a significant technical challenge and a potentially serious (underestimated) risk
 - 75 % of APP's total sites in Riau and Jambi will be on peatlands





APP fiber supply – risks (2)

Social conflict and uncertain land tenure

- Regional autonomy has led to sharp increase in land claims and illegal logging
- Security of existing plantation sites not guaranteed
 - In Jambi, APP lost 70,000 ha to local claims in 2001
→ (25% of total concession)
 - In Riau, 57,000 ha at APP sites now subject to claims

AMEC audit: *“The existing level of claim disputes can have a large impact on sustainable wood supply plans. If the number of successful claims escalates, it will have a further severe impact.”*



APRIL fiber supply strategy (1)

APRIL is competing with APP for land and fiber in Riau province to supply Riau Andalan Pulp & Paper

- RAPP BHKP capacity = 2.0 m Adt/yr
- 60 % of wood supply was MTH in 2006 (est.)

APRIL seeking to develop 330,000 ha of Acacia in Riau

- 195,000 ha at own sites; 85,000 ha at JV sites (with other plantation co's); 20,000 ha at community sites
- Approx. 264,000 ha (net) planted by mid-2006
- → 43 % of existing planted area is on peatland sites

APRIL trying to convert large JV areas to meet 2009 'sustainability' target.



APRIL fiber supply strategy (2)

- Generally, APRIL's plan for meeting its 2009 target for 100% acacia seems more achievable than APP's, in terms of annual planting
 - Based on increase in annual planting from 19,000 ha (2000) to 47,000 ha (2002 and beyond)
 - In 2004, APRIL reportedly planted 49, 242 ha across all sites.
 - In 2005, APRIL reportedly planted 51,377 ha across all sites.
- **But**, APRIL's commitment to 100% acacia applies only to currently installed pulp capacity – i.e. the existing 2.0 million tonnes.
 - **The company offers no assurances that any additional capacity will be fed with acacia**



APRIL fiber supply strategy (3)

- **For APRIL, what do ‘sustainability commitments’ really mean in light of the company’s plan to expand its pulp capacity?**
 - The company reportedly plans to expand pulp capacity to 4.0 million Adt/yr – the timing of this expansion is not yet announced
 - APRIL also plans to expand its net plantation base to 600,000 ha (suggesting that it aims to obtain a gross plantation base of up to 1.2 million ha in Riau)
 - Expansion on this scale raises fundamental questions about the significance of the company’s stated commitment to assess and protect high conservation-value forest (HCVF)



HTR Community-based plantations

- The Ministry of Forestry's 'Nine Million Hectare Plantation Plan' intends to allocate 5.4 million ha to small-holder tree planters in 15 ha blocks.
- Credit will be provided through a new financial institution to be created by MoF, and will use Reforestation Funds
- The small-holder component will reportedly be limited to Sumatra and Kalimantan
- Land allocated has been determined to be 'free of existing rights' ('lahan bebas dari hak')



Lessons from out-grower schemes and nucleus estates

- Indonesia has a long history with small-holder tree-planting schemes, structured both as out-grower arrangements and nucleus estates

These offer potentially important lessons related to:

- Accountability and terms of partnership
- Labor, access to markets, and indebtedness
- Land tenure and conflict



Issues for stakeholders

- How to ensure that new plantation development does not place new pressures on Indonesia's remaining natural forests?
- What can be done to clarify tenure rights of local communities, and address tenure claims before they turn into conflicts?
- How to approach HTR community plantations – to allow small-holders to choose species and to whom they will sell their trees?
- What mechanisms are needed for transparency and accountability in use of the Reforestation Fund?
- Should new pulp industry capacity expansion be supported before a legal and sustainable fiber supply has been fully secured?
- What pace should be taken? –Need to review lessons from prior initiatives, carry out pilot projects, establish a system for monitoring and assessing progress, adapt the targets as needed