

Land use, spatial planning, and potential implications for REDD+ in Indonesia: A preliminary analysis

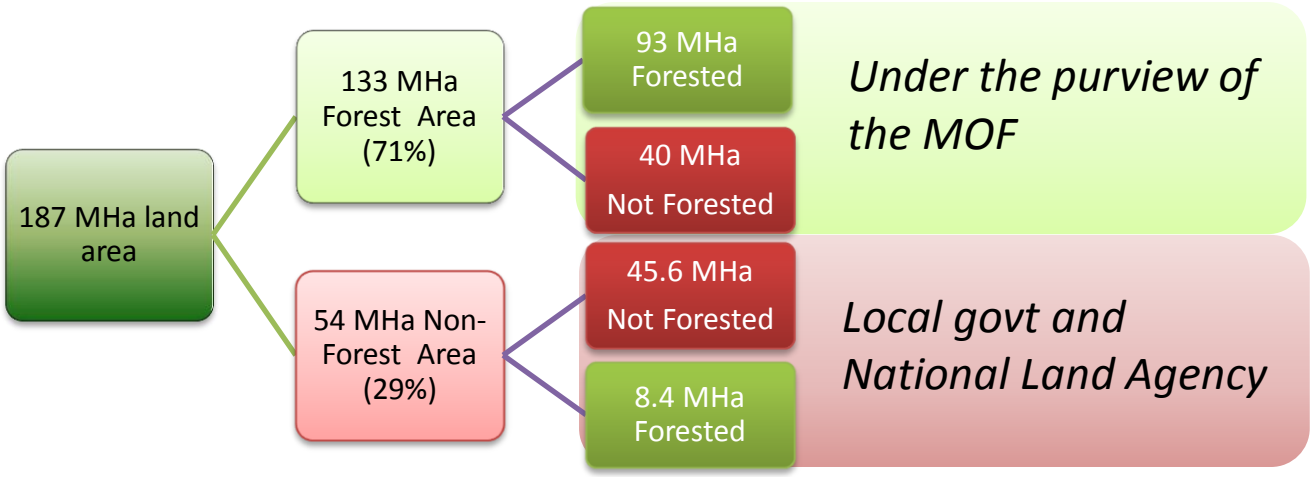
Ida Aju Pradnja Resosudarmo

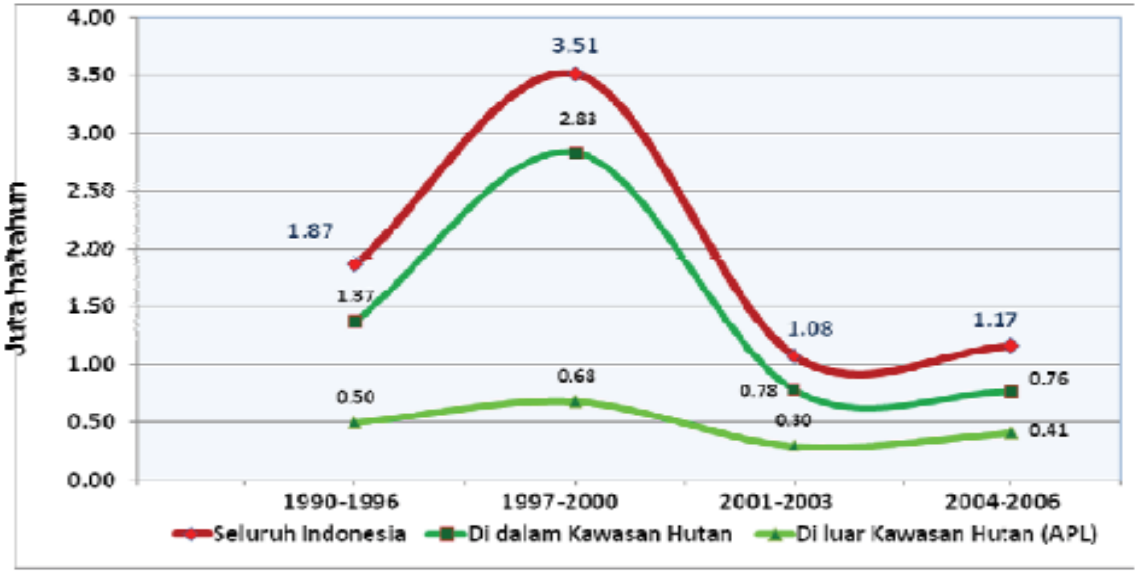
Pekanbaru, May 11, 2012

THINKING beyond the canopy

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Context-1: the Forest Area



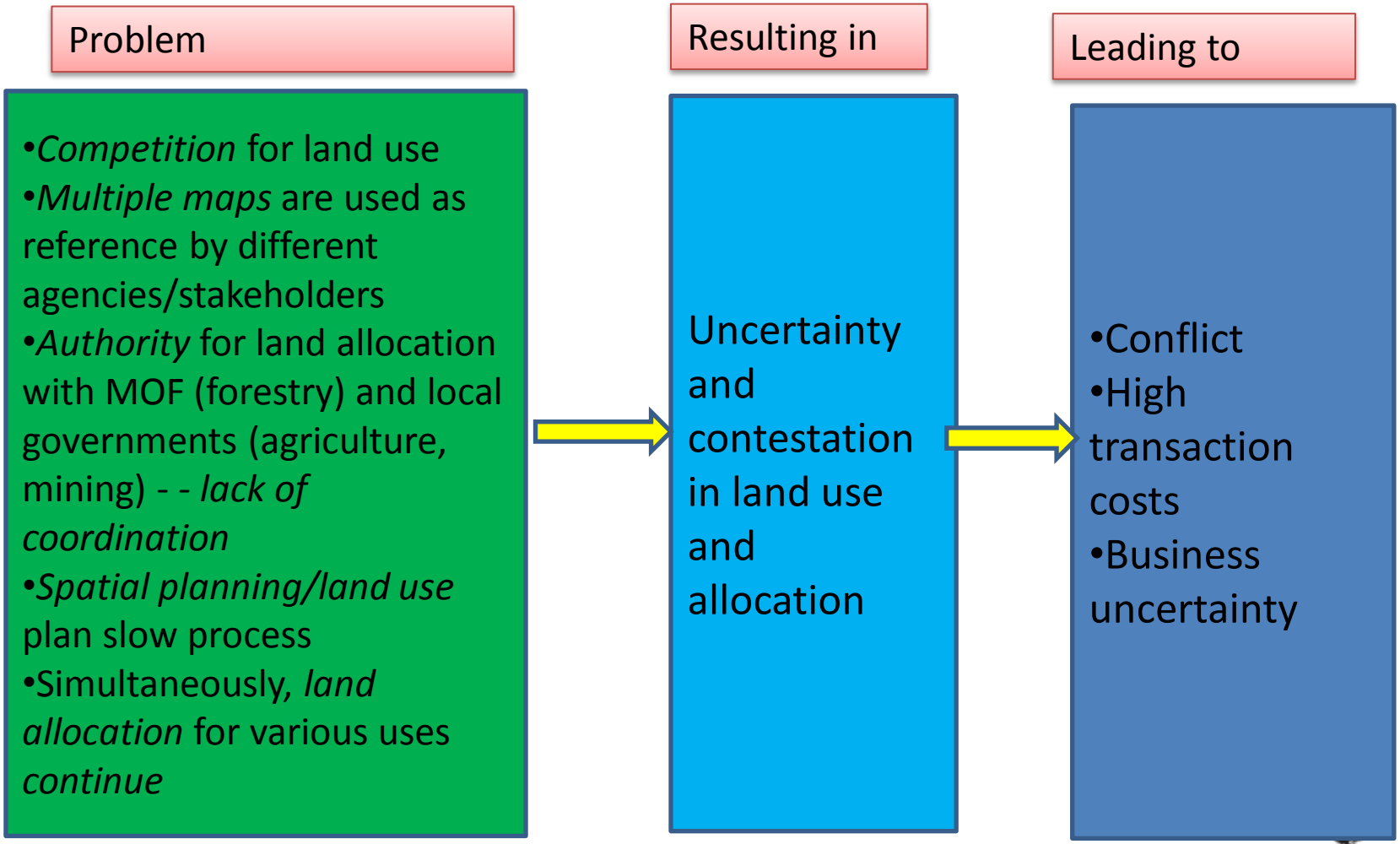


Source: Directorate of General of Planning, MoF, 2010

Context-2

- Large area of forests but high DD also means high GHG emissions
- Commitment of 26% emission reduction by 2020:
  - >80% reduction earmarked from forests and peatlands (National Action Plan for GHG emission reductions);
  - reduction target from other sectors small
- Forest lands provide the base for Indonesia's NR-focused development and livelihood activities

Problem


Problem
Resulting in
Leading to
•*Competition* for land use
•*Multiple maps* are used as reference by different agencies/stakeholders
•*Authority* for land allocation with MOF (forestry) and local governments (agriculture, mining) - - *lack of coordination*
•*Spatial planning/land use* plan slow process
•Simultaneously, *land allocation* for various uses *continue*
Uncertainty and contestation in land use and allocation
•Conflict
•High transaction costs
•Business uncertainty

Pressure on forests: competition for land use

- **Agro-industrial development**
  - Vast areas of forest conversion
    - Yet some 30 MHa of unproductive lands are available

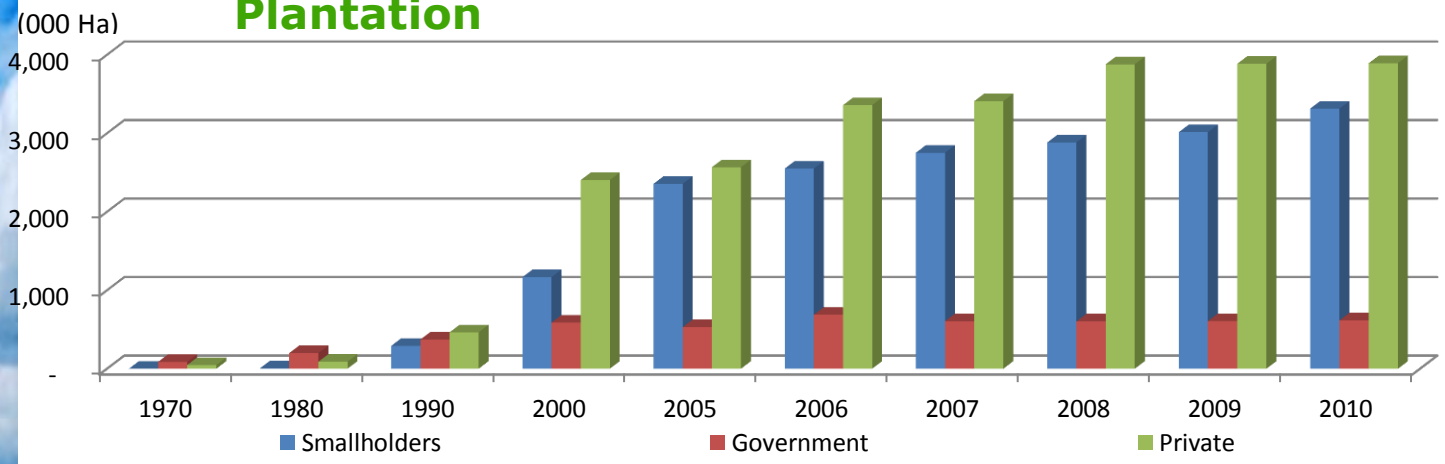
- **Mining**
  - Smaller in terms of area but in effect significant implications for forests

- ***Disconnected* vertical and horizontal policies and objectives**



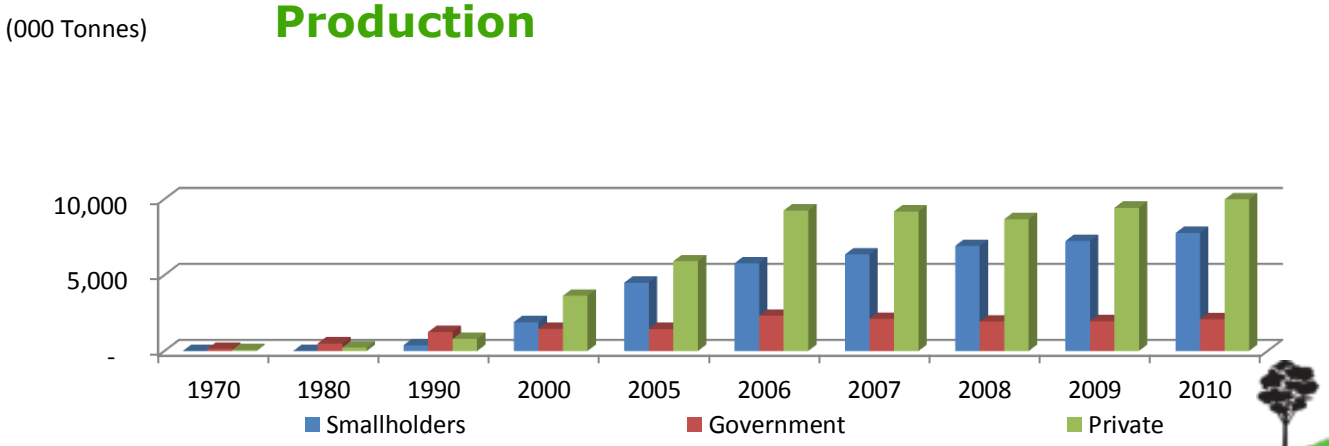
Oil palm expansion (1)

Plantation



Source : Ministry of Agriculture (2011)

Production



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Oil palm expansion (2)



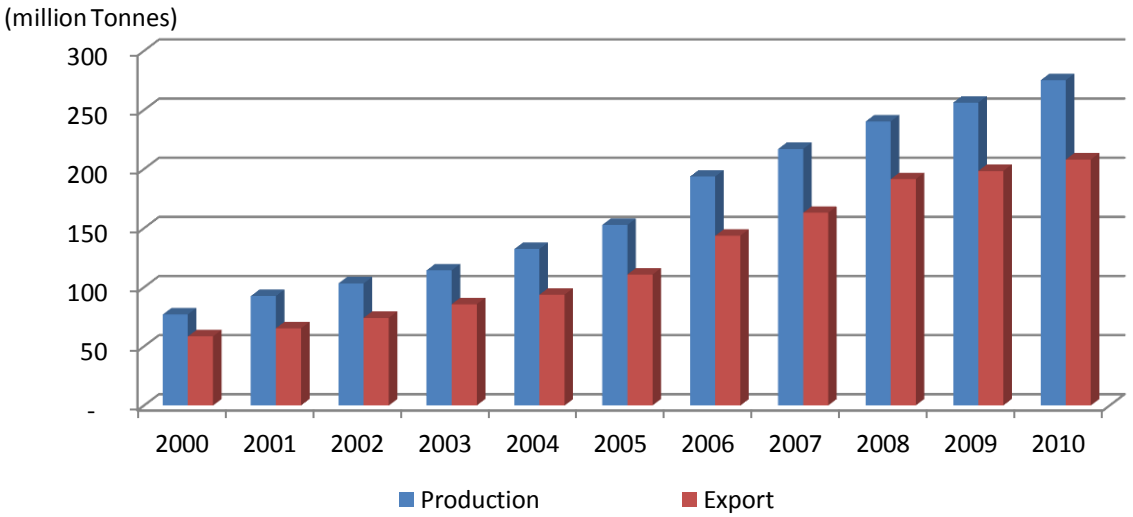
- Until 2010, MOF data show 4.9 MHa of forest area have been released for plantation
- Up until mid 2010, regional governments in Sumatra, Kalimantan and Sulawesi proposed land use change over 16.5 MHa of forests
- In Central Kalimantan 3.9 MHa of oil palm establishments are located in areas that have not been released from the Forest Area by the MOF (and therefore ***Illegal****??*)

- **Issues**:
  - Licensing procedures not followed
  - Local Governments authority vs Central Government
  - Sectoral laws and objectives
  - No agreed-upon reference maps: spatial plans (RTRWP/Ks) vs TGHK
-



- > 40% of domestic power supply
- 74% for export
- Largely in forests

Coal Mining



Year	Power Station from Coal (GWh)	%	Electricity Production Total of all Power Station (GWh)
2005	51,793	41	127,371
2006	58,630	44	133,109
2007	63,817	45	142,440
2008	61,392	41	149,438
2009	64,976	42	155,333
2010	68,041	41	165,621

Source : Ministry of Energy and Mineral Resources (2011)

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Mining in Central Kalimantan

	Unit	Area (Ha)
With forest lease permits	9	31,747
Without forest lease permits	606	3,719,871
Total	615	3,751,619
Forest Area based on TGHK		15,300,000

Mining threatens 25% of the Forest Area (*kawasan hutan)* in Central Kalimantan

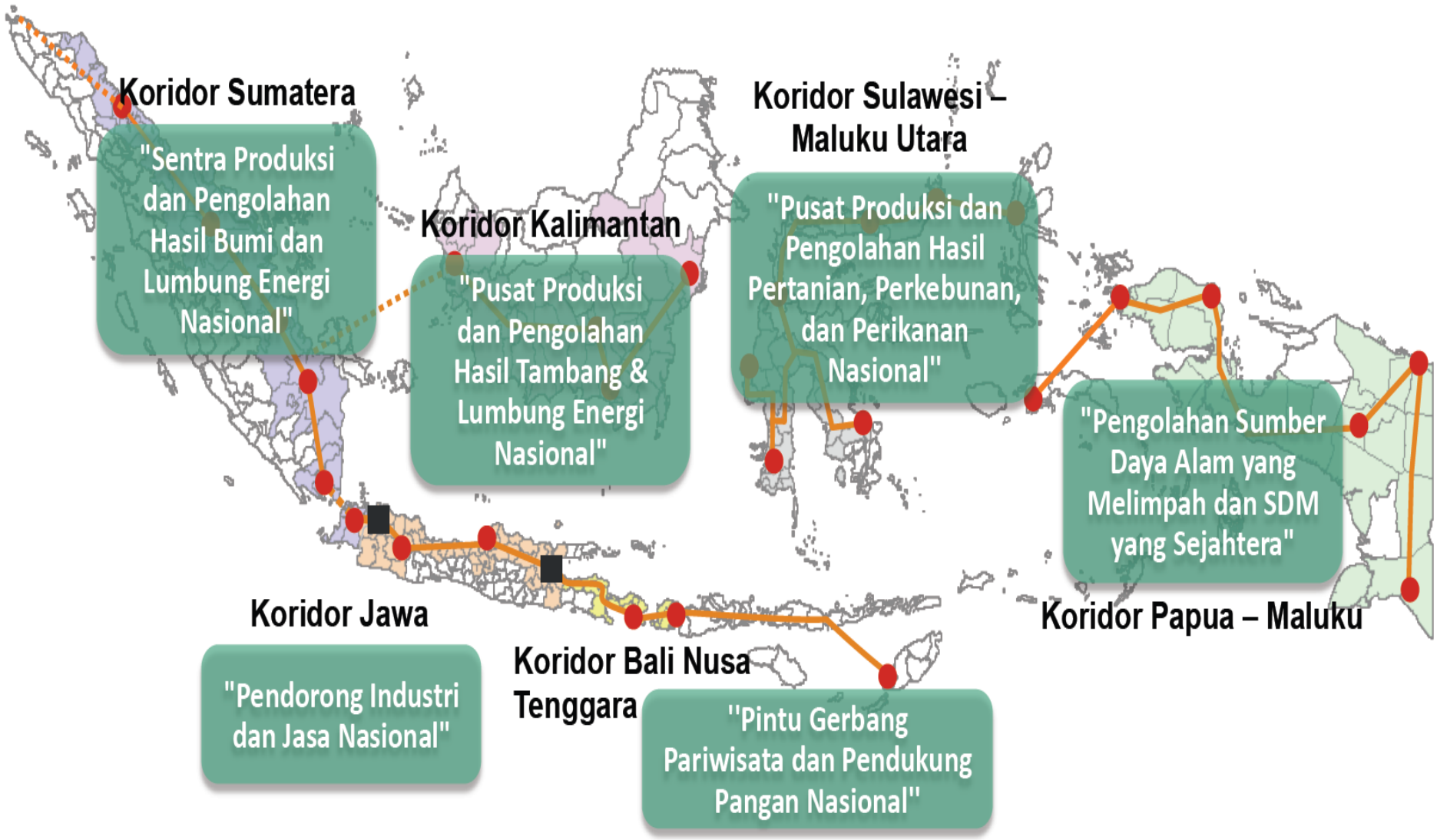
Mining in forests

- MOF sets a 10% limit on mining operations in a given (Production) forest area
- Between 2005 and May 2011, the MOF issued lease use permits for 459.8 Kha for exploitation and 1.58 Mha for exploration in forest area

However

- For all Kalimantan, the MOF reports of 903 units of mining operations in over 5.3 Mha operating illegally/without going through legal procedures.
- Mining licenses are mostly issued by local governments
  - Different maps are used
  - Licenses often overlap with each other.
  - 8,000 licenses issued by local governments were reportedly problematic (Rakhmanto 2011).
- Small scale 'illegal' mining operations are also increasing and persistent
- Spatial plan still in process

Master Plan for the Acceleration and Extension of Indonesia's economy



Tema pembangunan masing-masing koridor ekonomi

Forest and Land-use Planning



- **First phase**

  1982: Forest Use by Consensus (TGHK).

  The TGHK maps were ***macro and indicative***

  → **maps vs reality of land use**

- **Second phase** 1992: Spatial planning Law
  - attempts to synchronize the TGHK and RTRWP (*padu serasi)*
  - important provinces never completed their *paduserasi* or have them approved by MOF (e.g., Riau, Central Kalimantan)
- **Third phase**

  1999: New Forestry Law

  reemphasizes MOF's 'purview' over the Forest Area

- **Fourth phase**

  2007: New Spatial Planning Law

  "RTRWPs shall be completed in 2 years (i.e., 2009); RTRWKs in 3years (i.e., 2010)"

During which (mostly ad-hoc) rapid development and livelihood activities occur, and intensified under regional autonomy

Problems (1)

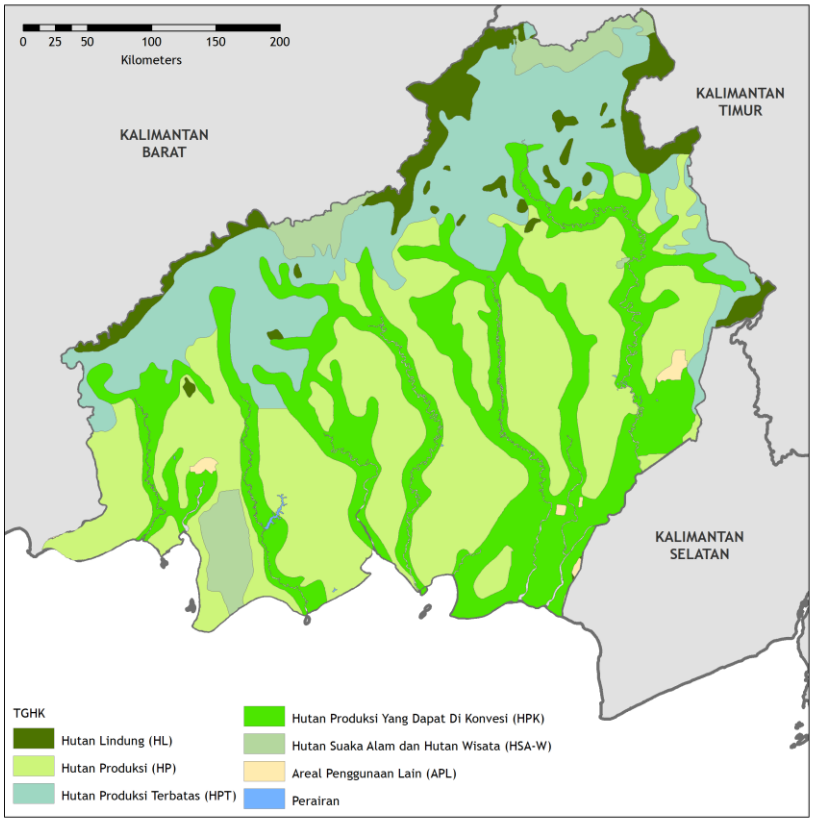
- **Many problems associated with the use of TGHK maps as reference for development planning in regions:**
  - **Incomplete demarcation of Forest Area boundaries (only 11.74% gazetted)**
  - **What about the people who have and/or are living in the area claiming their rights?**
- **Slow process of *paduserasi* between TGHK and RTRWP or in reformulating of RTRWP particularly in forested provinces because of complexity of existing land uses/allocation; e.g., existing uses not compatible with TGHK etc.**
- **As of May 8, 2012, only 13 out 33 provinces have had their RTRWPs approved**
- **Riau, Aceh, all of Kalimantan provinces, and Papua and West Papua have not completed their spatial plans (or have them approved): all 'stuck' in relation to Forest Area**
- **Thus, forested provinces have no (vertically and horizontally) agreed-upon reference on which to base their development plans**

Problems (2)

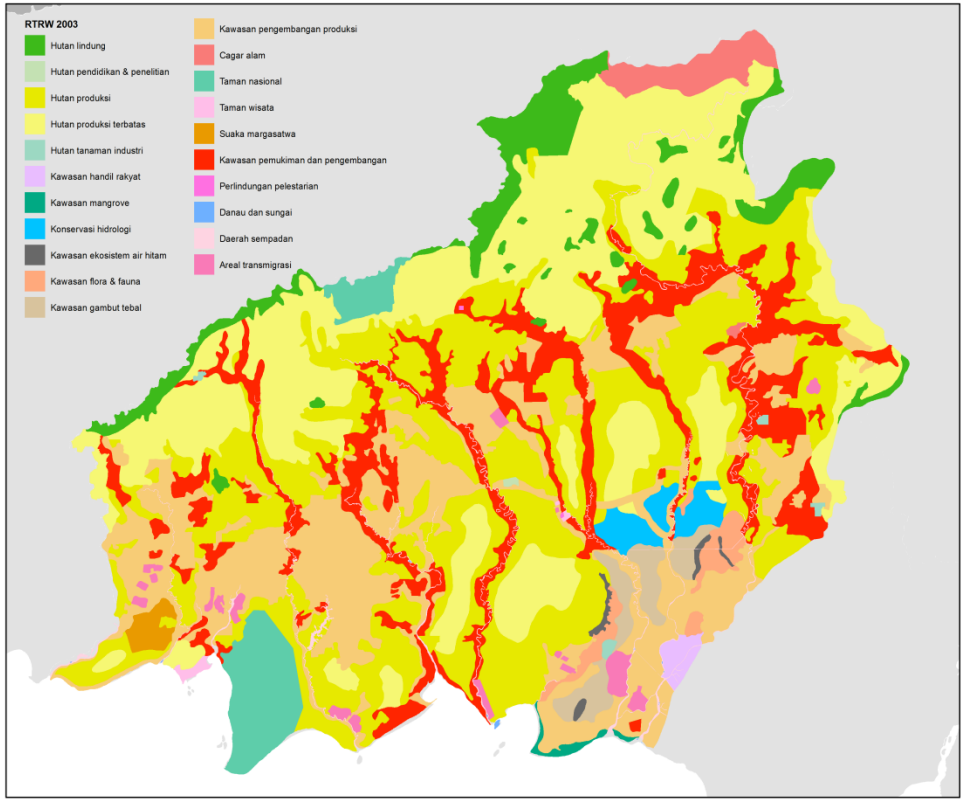
- Meanwhile activities and development in the regions continue: oil palm (local government), mining (local and CG), forestry (CG).
- Exacerbating existing overlapping land-uses, promoting conflicts on the ground, disconnect between sectors due to the different reference maps used and different objectives
- Local governments use maps that are advantageous to them: Legal status of Forest Area officially challenged by local governments (Central Kalimantan districts)
- Slow process of RTWP/Ks leads to continuing uncertainty of forest and land status in the regions
  - Implications on the issuance of forestry and non-forestry licenses; including REDD+ projects
  - Implications on local communities' tenure and activities
- Hampers the implementation of land and natural resource-based development policies

E.g. Central Kalimantan

- **TGHK – referred to by MOF**



RTRWP 2003 – referred to by local government





Implications for REDD+ (1)

Prior to the establishment of REDD+ projects:

- Difficulties in identifying areas with a reasonable degree of certainty over their use and rights
- Proponents will require a considerable degree of certainty that there will be no other developments over the same forest area that may overturn the REDD+ license during its lifetime.



Implications for REDD+ (2)

During implementation of REDD+ projects:

3 criteria for REDD+ implementation: Effectiveness (additionality, permanence, leakage), efficiency (lowest cost), equity

Instability associated with unclear (and not respected) boundaries, uncertain land use planning and unclear rights can risk permanence, shoot up costs, and raise equity problems

Indiscriminate issuance of licenses threatens the stability of REDD+ projects and risks non-delivery of carbon



Implications for REDD+ (3)

Competing interests with REDD+ for Forest Area: whether REDD+ monies and other related REDD+ benefits will be able to compete with the formal and informal income and other benefits that oil palm and mining activities currently generate for the stakeholders concerned.

(BIG) Homework

- Agreed-upon and respected land and forest maps
- What to do with the numerous existing overlapping land uses?
- How to uphold and implement consistent policies and regulations across sectors
  - E.g. moratorium of forest and peat land conversion; MP3EI with its 6 corridors, provincial spatial planning with island-based spatial plans
- Improving governance and vertical relations

Thank you

