

The UN-REDD Programme

Asia/Pacific Knowledge Management Action Plan, 2015

Regional Knowledge Exchange on National Strategies/Action Plans

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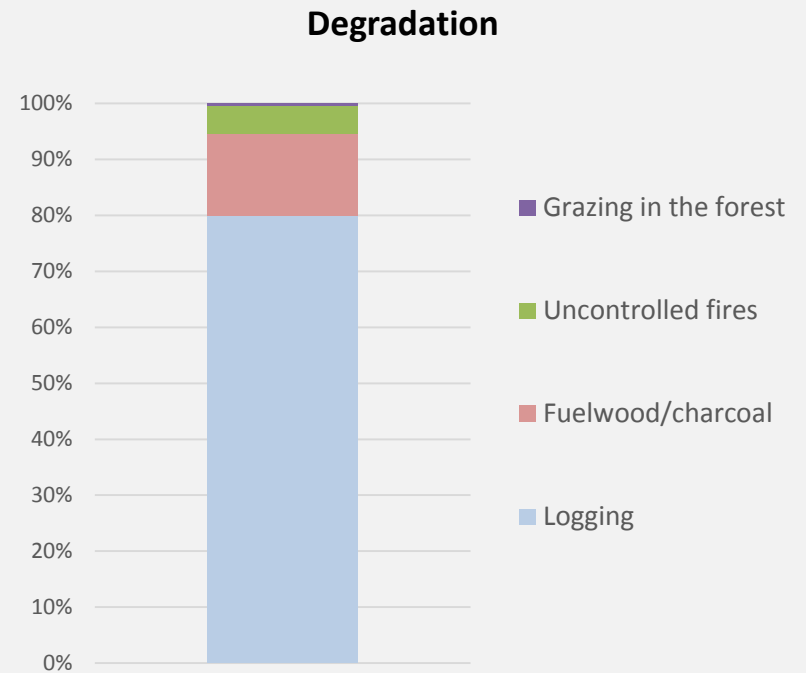
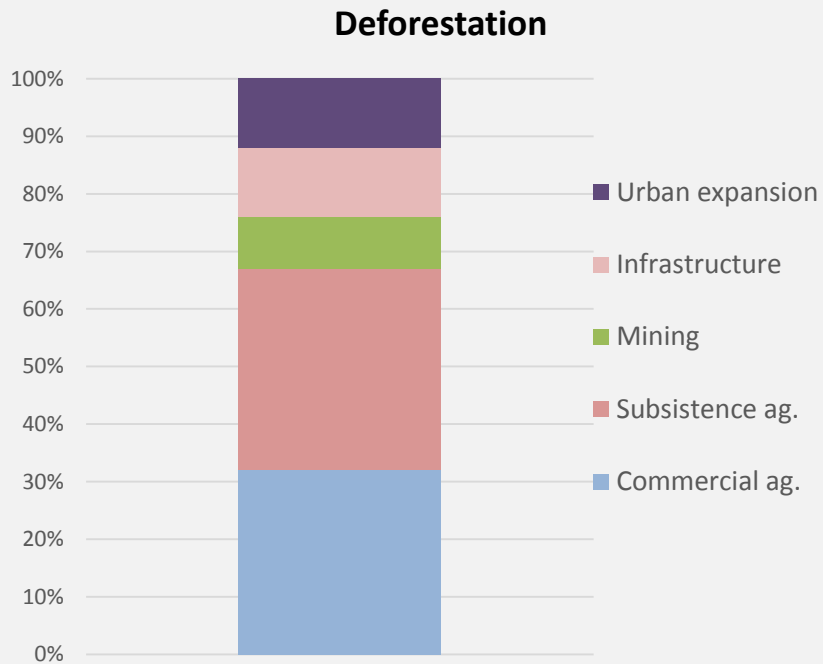
**Day 1, Session 3: Analysing Drivers of DD
and Barriers to the “+” activities: Indonesia
and general comments**

Definitions

- **Proximate/direct causes:** human activities or immediate actions that directly impact forest cover and loss of carbon
 - Deforestation: commercial agriculture, subsistence agriculture, mining, infrastructure and urban expansion
 - Forest degradation: logging, fires, livestock grazing in forest, fuelwood collection and charcoal production
- **Underlying/indirect causes:** complex interactions of fundamental social, economic, political, cultural and technological processes - often distant from their area of impact
 - Important to address them separately and examine them at various scales for specific analysis and intervention strategies



Direct/Proximate Drivers - Asia

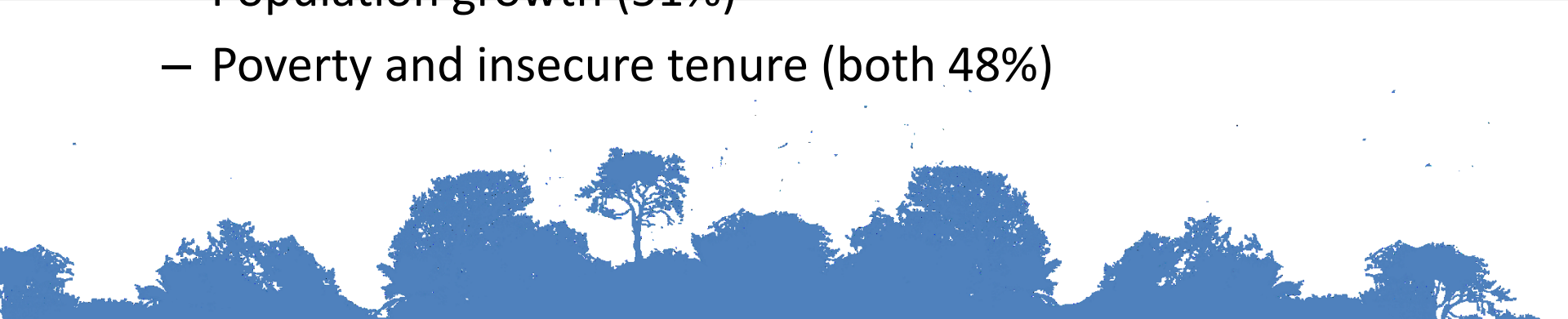


Source: Adapted from Hosonuma et al., 2012



Indirect or Underlying Drivers

- Economic growth
 - Based on export of primary commodities
- Population growth / Urban growth
- Demand for timber and agricultural products
- Countries (31 national REDD+ R-PPs):
 - Weak forest sector governance and institutions, conflicting policies beyond forest sector and illegal activity (93%)
 - Population growth (51%)
 - Poverty and insecure tenure (both 48%)



Background to the Drivers/Barriers Analysis in Indonesia

Direct driver assessment:

Quantitative information on land cover:

- Step 1: Time series land cover maps
- Step 2: Map deforestation areas for subsequent time periods
- Step 3: Link deforested areas to post-forest land use
- Step 4: Quantify the different drivers of deforestation (for the time period 2000–2009)
- Step 5: Link drivers to GHG emissions (Romijn and Herold, 2015)

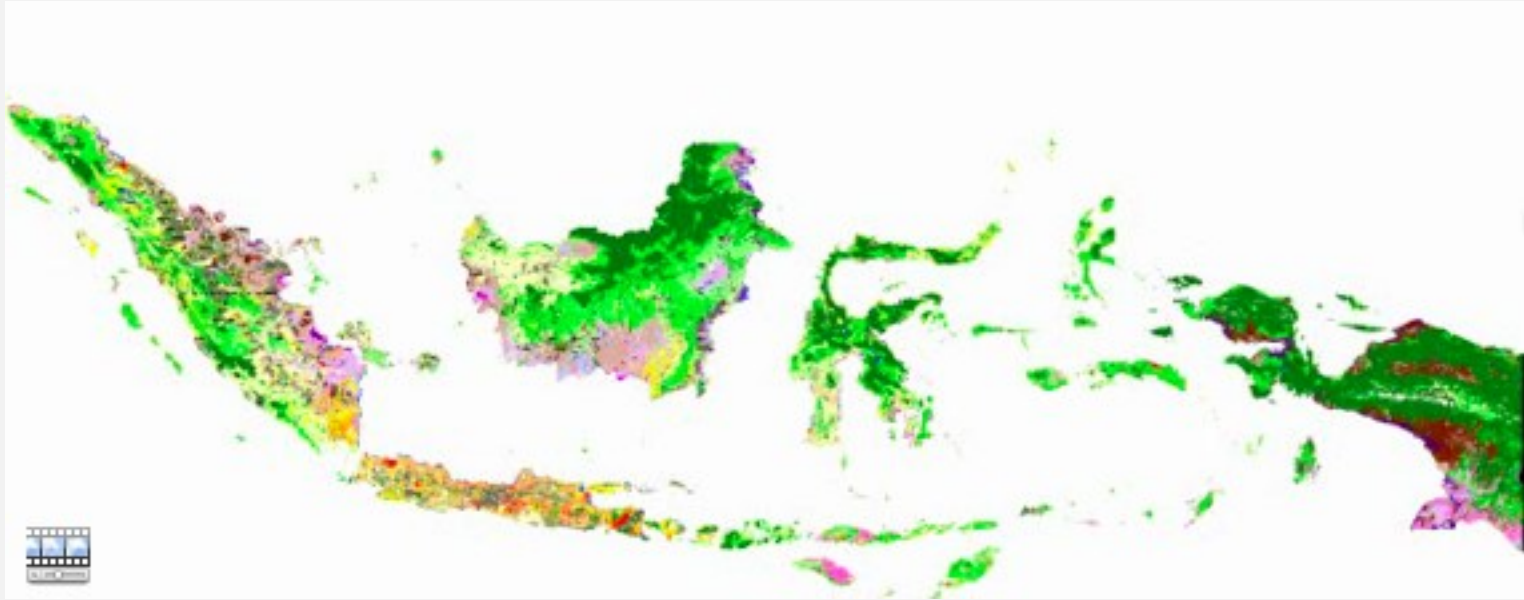
Indirect drivers identified in readiness plans:

- Corruption, governance factors (Source: R-Plan)
- Resolving land issues between central and local governments, need for certainty between forest land and non-forest land (MOFOR)
- *Note what is not included here!*



Direct driver assessment

Step 1a: Time series land cover maps



Step 1b: Land-cover classification

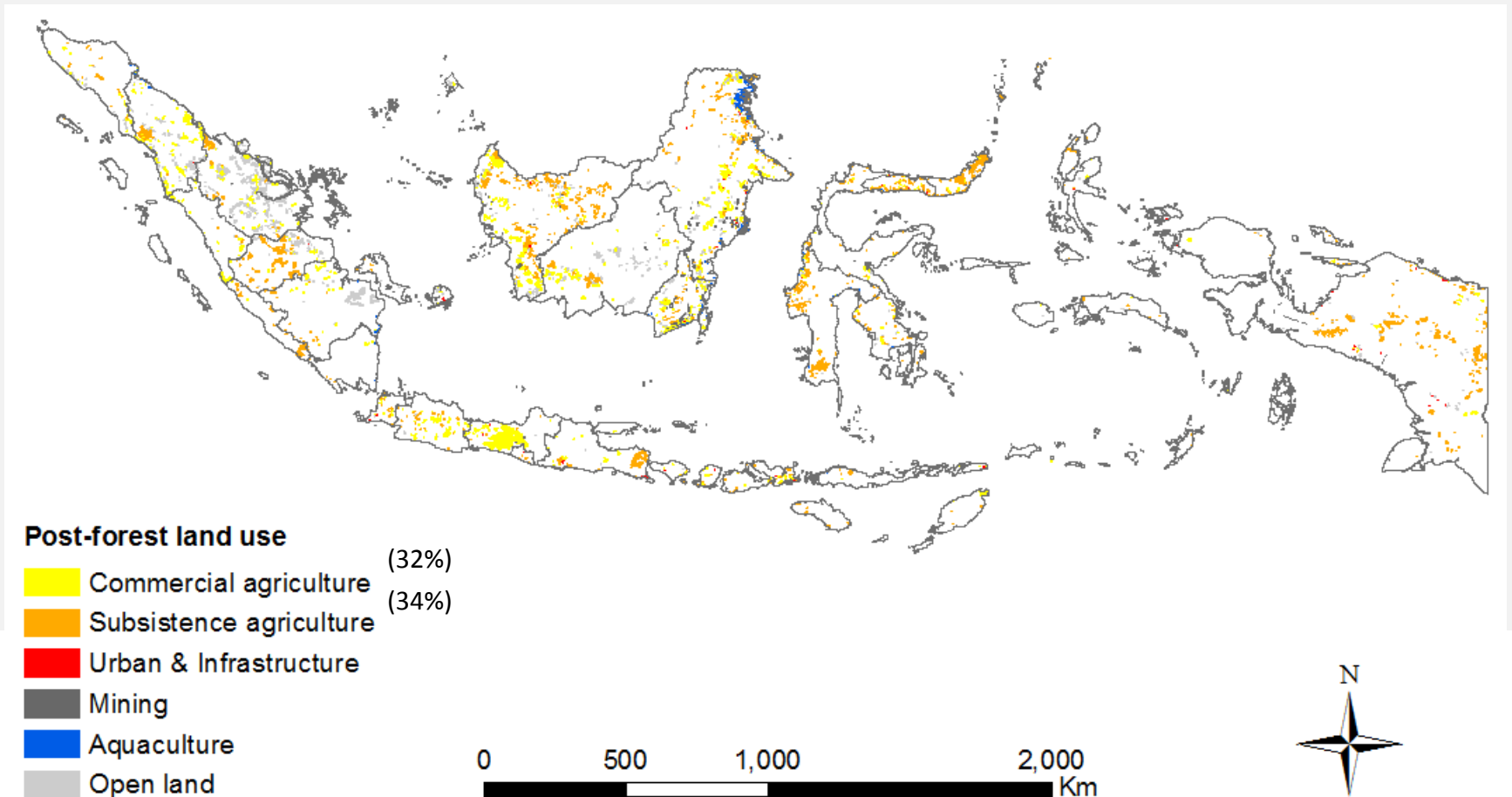
- FAO definition, sub-categories within primary, secondary, degraded forest...

Step 2: Map deforestation areas for subsequent time periods

- Deforestation areas mapped for three time periods (2000–2003, 2003–2006, and 2006–2009).
- Deforestation, forest degradation, and reforestation / regeneration were defined:
 - Deforestation: change from primary or degraded forest into nonforest
 - Degradation was defined as the change from primary forest into degraded forest



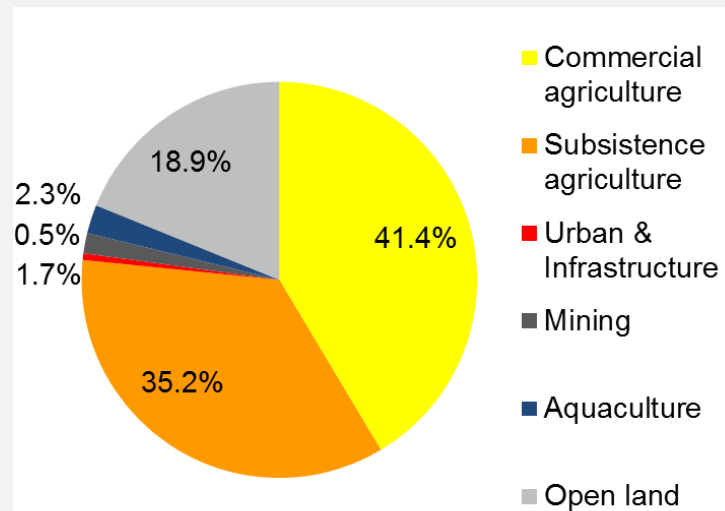
Step 3: Drivers of deforestation 2000–2009: Post-forest land use per the FAO forest definition



Source: Romijn and Herold, 2015

Step 4: Quantify the different drivers of deforestation (for the time period 2000–2009)

Distribution of different drivers in terms of area change:



Step 5: link different drivers to GHG emissions

- Carbon density (emission factor) for different forest types + activity data for different drivers

Source: Romijn and Herold, 2015 and MOFOR, 2011

Challenges Encountered with the Drivers/Barriers Analysis

- Lack of compatible data across ministries
- **Answer:** One Map Policy and Badan Informasi Geospasial (BIG)



BADAN INFORMASI
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Underlying drivers: how to address these?

...Often they are outside of the forest sector, and require cross-sectoral fact finding



How can government support for agriculture production better align with REDD+?

- Agricultural subsidies = \$486 billion across 47 countries in 2012 (Worldwatch Institute, 2014)
- Agriculture support as a percentage of gross domestic product (GDP) is highest in Indonesia at over 3% (OECD, 2013)

Domestic agriculture subsidies compared with REDD+ finance commitments (av. annual, \$ million)



Rationale for examining fiscal incentives

1. Fiscal policies and incentives influence drivers of land use change – but understanding of their impact on forests is often lacking
2. Examining fiscal incentives is important to prioritize what interventions can stem driver behaviour, for REDD+ policies and measures to be effective and to reduce GHG emissions



REDD+ as an entry point to rethink fiscal incentives for agricultural commodities

1. Public policy, fiscal policy & incentives must seek coherence across sectors, and send the right signals to different actors. **However**, a review of 43 REDD+ readiness plans shows that very few countries mention the need to review fiscal incentives (Salvini et al, 2014).
1. Fiscal incentives supporting agricultural production **can be important levers to promote sustainable land use – if they are conceptualized and designed to do so**. Consider how to balance economic, social and environmental objectives.
1. Pathways for REDD+ countries to reverse perverse incentives, reform existing ones, or design new incentives are **highly context-specific**, and depend on the pressures on forests, national development objectives, and many other factors.



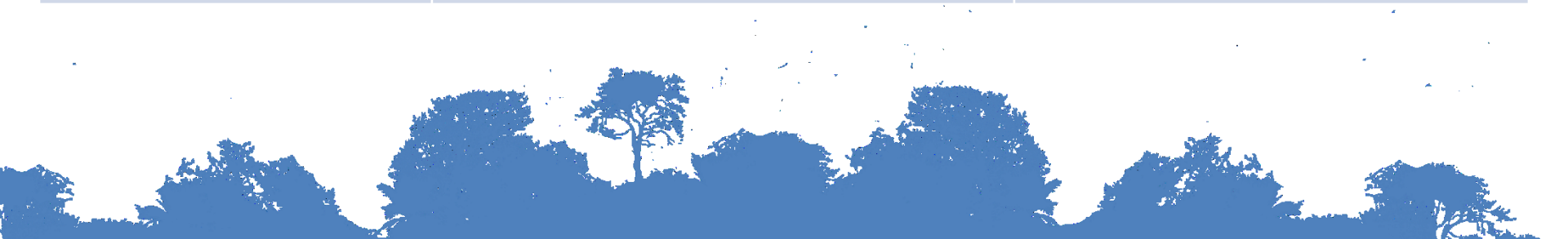
Ecuador - context

- 47% increase in GHG emissions from the agriculture and forest sector between 1990 and 2010
- 99.4% of deforested areas were transformed into agricultural areas— mostly industrial monocultures and livestock
- Area under palm oil cultivation increased 77.7% between 2000 and 2013



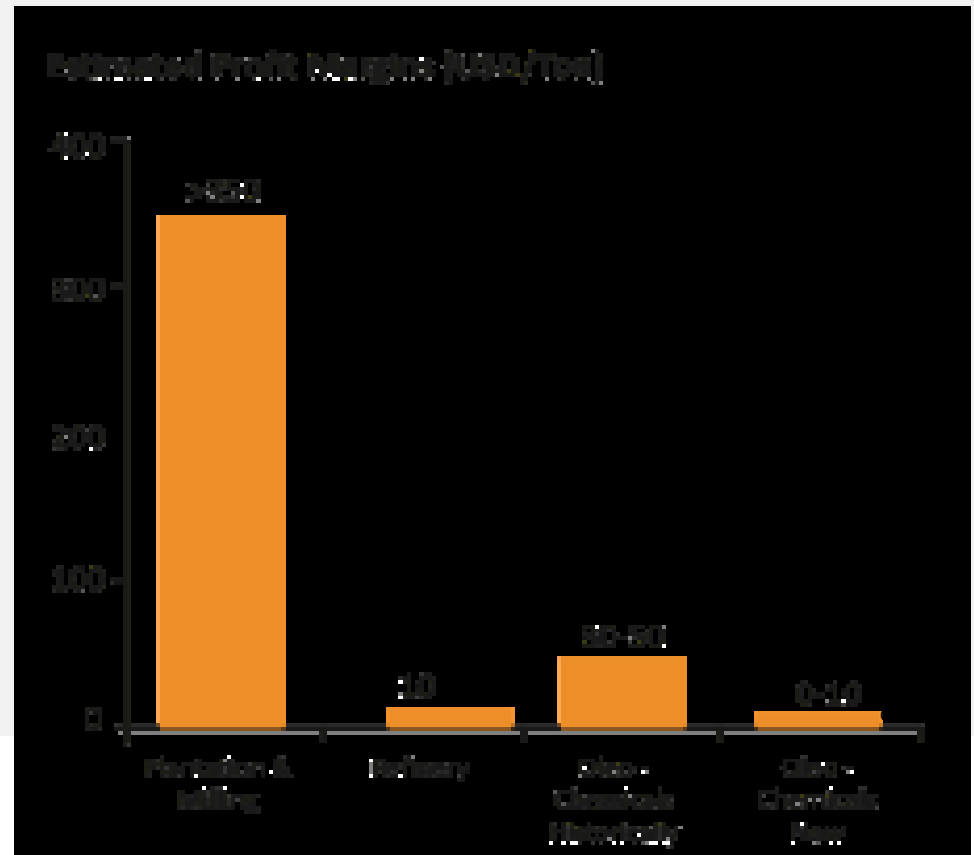
Preliminary results of analysis in Ecuador

High probability of negative impact	High probability of positive impact	Low to medium impact
Subsidies to urea	National Programme for Palm	Income tax exemptions on new investments
Planting Partner Programme	Income tax deductions available for clean technologies	Deductions for hiring staff with disabilities
Subsidies to fuel and electricity	Release from payments on advances to IT for agroforestry and silviculture	The ITR generated x 4 will be deductible IR Global
Release from payments on advances to IT for new investments	Exemption from tax for rural land under 25 ha	0 % VAT rate on import of edible oils
0 % in VAT for import of seeds , bulbs, fertilizers , pesticides, etc.	Exemptions from tax on rural land communes , unions, etc.	0 % VAT rate on import of agricultural machinery



Preliminary results of oil palm analysis in Indonesia

- Inadequate capture of economic rents from oil palm plantations
- Current state budget allocation priorities in the agriculture sector may not deliver on sector growth and food security
 - National spending on agriculture \uparrow 11%/yr, but agricultural production only \uparrow 3% (2001-2008)
- Prioritize improving budget efficiency in the context of redesigning fiscal incentives



Thank You

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