



RIGHTS AND RESOURCES  
INITIATIVE



SUPPORTING FOREST TENURE, POLICY AND MARKET REFORMS

# Drivers, Opportunity Costs and Policy Options to Reduce Emissions and Enhance Stocks

Independent Civil Society Advisory Group

UN-REDD Policy Board

International Monetary Fund, Washington D.C.

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# Findings from Three Studies

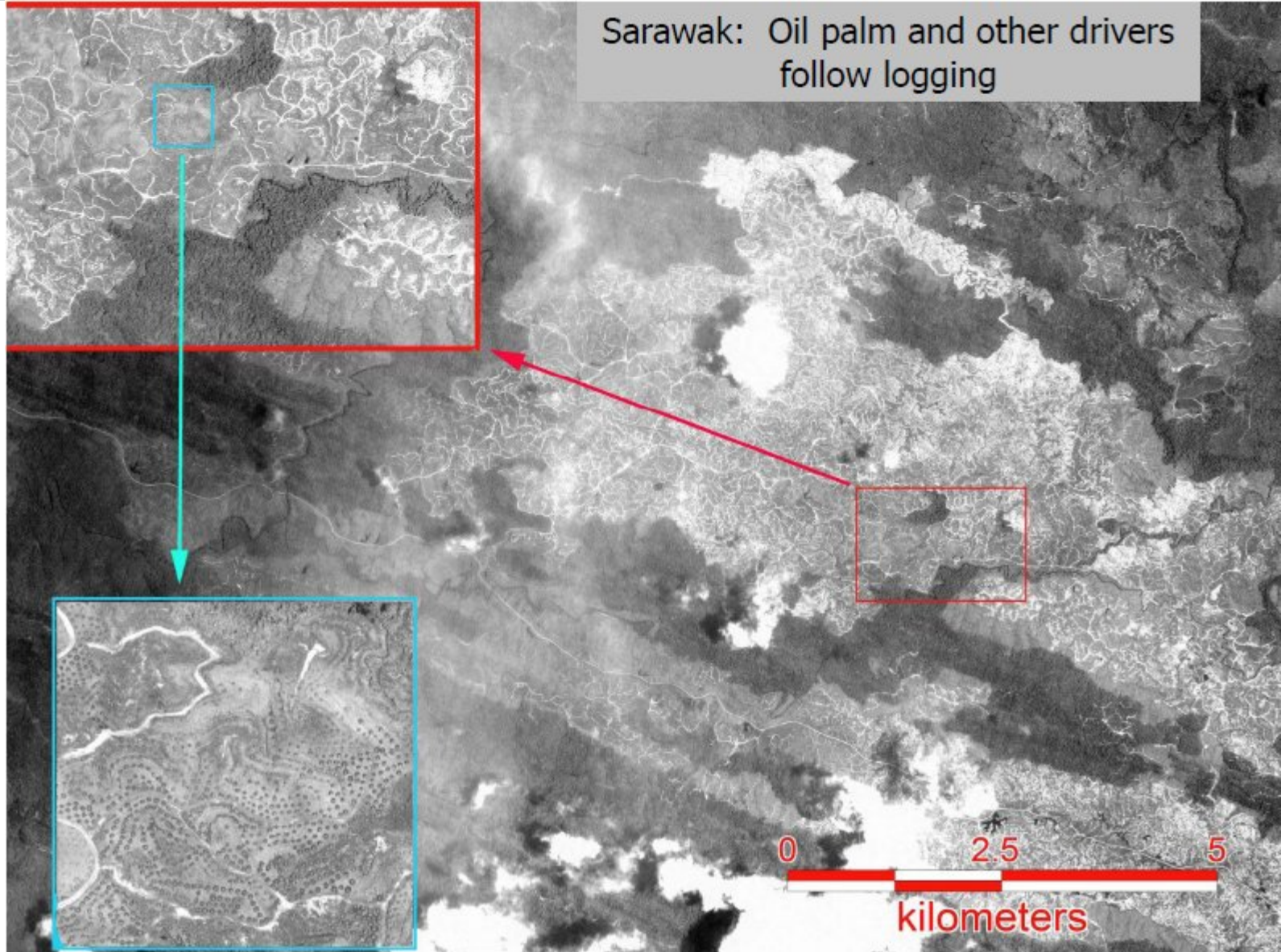
1. *Who Drives Tropical Deforestation?* Jane Bryant, Phil Shearman et al. forthcoming, RRI.
2. *Does the Opportunity Cost Reflect the Real Cost of REDD+? Rights and the Realities of Paying for REDD+.* Hans Gregersen, Hosny El-Lakany, Alain Karsenty, Andy White, 2010, RRI.
3. *Afforestation, Reforestation, and Restoration of Degraded Lands: A Necessary Complement to REDD+.* Hans Gregersen, Hosny El-Lakany, Luke Bailey. Forthcoming, RRI.



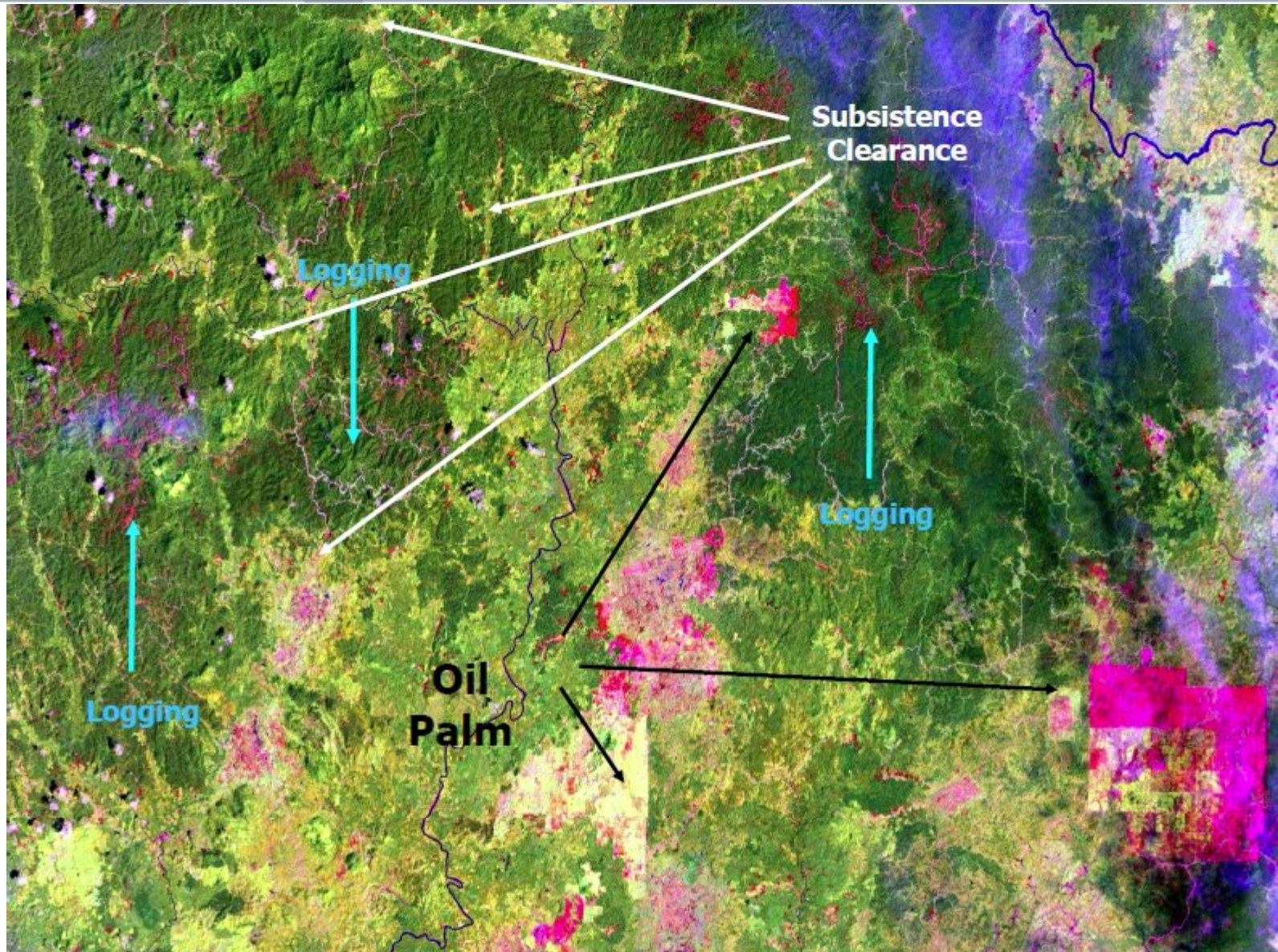
# Who Drives Deforestation?

Main direct drivers	Share of total deforestation & degradation	
	UNFCCC 2007	Bryant et al. forthcoming
Small scale agriculture & shifting cultivation	42%	~5-25%
Commercial crops	20%	~25-45%
Cattle ranching	12%	
Commercial wood extraction (both legal & illegal)	14%	~50%
Subsistence fuelwood & NTFP gathering	6%	
Traded fuelwood & charcoal	6%	
Total	100%	100%

# Drivers: Integrated & Complicated



# Oil palm Plantations in Sarawak





# Who Drives Deforestation & Degradation?

## Lessons:

- Complicated and integrated (spatially and temporally)
- Best evidence: Brazil (mostly instigated by government policy)
- Government primary driver (in majority of countries and area)
- Local people (less significant, and even then usually following gov't instigated)



# Framework for Identifying Drivers

## I. First, identify the direct drivers:

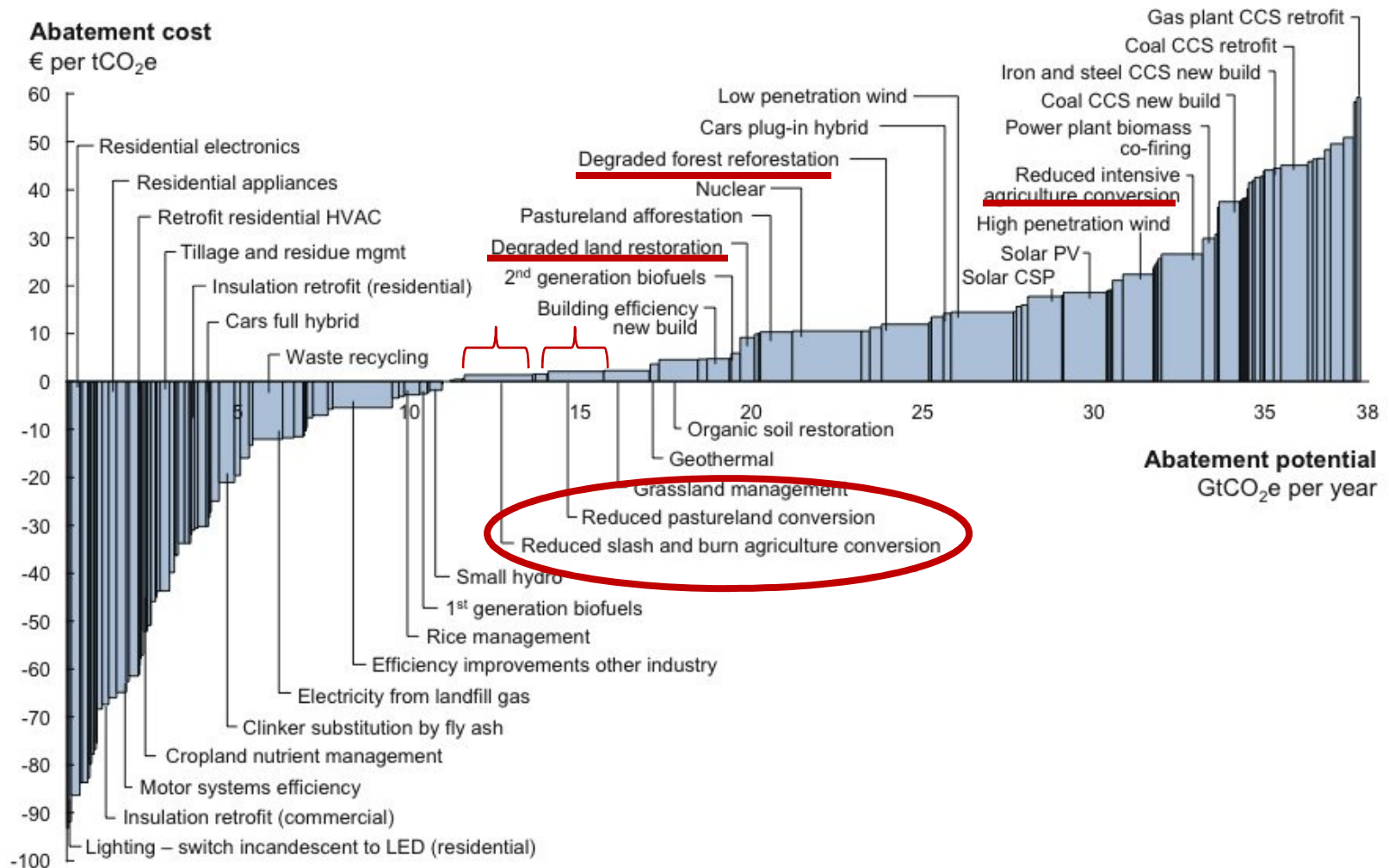
1. Who's doing the deforestation/degradation?
2. What authority/rights/access over the forest land?
3. What is the sequence of events?

## II. Then, indirect drivers:

4. What markets and policies push the deforestation or degradation?
5. What commodity demand or vested interests are behind the market or policy drivers?
6. What are the standards (or lack thereof) that shape that driver?

# The Real Opportunity Costs for REDD+?

Abatement cost (h) and potential (w) of various mitigation activities:







# What are the real costs of REDD+?

Opportunity cost of deforestation or degradation:

The net value foregone by the owner of the rights to the forest if the forest is protected instead of being removed and the land used to produce other outputs.

- Example: If the forest owner intends to deforest and produce palm oil on a hectare of forest that would give the forest owner a net return of \$600/ha/yr, then that amount is the owner's opportunity cost.

Many issues could lead to underestimation of the real costs and misleading the debate and design of REDD+ programs

- Corruption and illegal activity,
- Contested property and use rights
- Limited technical and financial capacity
- Potential for leakage and "environmental blackmail"



# Framework for Identifying Real Costs

Appropriateness of using OC depends on both type of actor and socio-political context.

## I. First identify the forest tenure situation of the area:

1. Clearly illegal to remove the forest
2. Clearly legal to remove the forest
3. Legal use rights not clearly defined and assigned

## II. Identify type of actor:

- a. Government entities
- b. Public corporations, e.g. logging, livestock, soy bean, biofuels, etc.
- c. Entities with clear use rights but mainly operating outside the market economy
- d. Private entities with clear title to land and operating within market economy

# 1) When deforestation is illegal...

- Forbidden by zoning laws/regulations, or
- Those deforesting have no legal rights to the forest

## IN THIS CASE:

- OC is not appropriate
  - You don't pay someone not to commit a crime
- Instead, either
  - enforce the law, or
  - change the law (e.g., tenure reform)



## 2a/b) Legal gov't-led deforestation...

For government entities, a variety of cases may apply:

### 1. Resettlement/land reform

Relevant cost: economic development foregone. How calculate that? If politically driven, halting it may be unacceptable to govt. Thus OC irrelevant.

### 2. Forest concessions

Relevant cost: loss of concession fees, log taxes, employment lost, export taxes, and other benefits to country associated with economic development.



## 2a/b) Legal gov't-led deforestation... cnt'd

### 3. Inadequate enforcement of laws against illegal logging and corruption

Relevant cost: is cost to government of adequate enforcement to stop illegal logging and corruption.

### 4. Perverse laws

Relevant cost: the benefits foregone by not stimulating the activity being subsidized.

### 5. Infrastructure projects

Relevant cost: economic development benefits foregone. How to estimate?



## 2c) Legal forest removal, informal sector

For individuals, communities & private enterprises with clear land rights existing outside the main market economy:

- OC is only a starting point for determining needed payments.
- Other likely needed costs would include significant investments in new livelihood options, housing, etc. Otherwise leakage is bound to occur.
- Transactions costs can be high.

## 2d) Legal forest removal, formal sector

For individuals, communities & private enterprises with clear land rights existing within the main market economy:

- OC could be a relevant indicator as a starting point for REDD+ payments negotiations.
- However, additionally criteria need to be considered.
- “Environmental blackmail” is a big risk
- In case of gov’t concessions to private enterprises: Forest sale price is relevant to OC if other non-forest investment opportunities are available.
- But if only options available are in forests, leakage will occur and thus OC is irrelevant (company should not be paid not to deforest.)

## 3) When forest tenure is unclear...

- E.g. Indigenous Peoples, forest communities, migrant farmers with customary or contested land rights
- If RIGHTS not legally recognized, they cannot make REDD contracts; thus their OC is irrelevant
  - Need is to legally assign and recognize rights through tenure reform
- Even if legal rights are given, payment equal to OC is not enough
  - Would need massive complementary investments in housing, alternative livelihood creation, education, etc. to avoid leakage





# Real Costs of REDD+ Key Conclusions

D&D primarily government driven – opportunity cost is high

1. Changing “business as usual” high political and financial costs
2. Recognizing rights reforming governance – political costs, low investment costs
3. REDD+ not “quick, easy, OR, CHEAP”



# Key Conclusions

1. Change gov't policies that promote D/D
  - EG moratorium on logging and clearing
  - High OC (revenue lost from concession, eg)
2. Reform tenure and governance
  - Lower cost abatement
3. Invest in GREEN (Growing Resilience and Economic Empowerment, Now)