

# Dynamic of REDD+ in Indonesia Opportunities and Challenges

Case Study Hutan Nagari Indonesia

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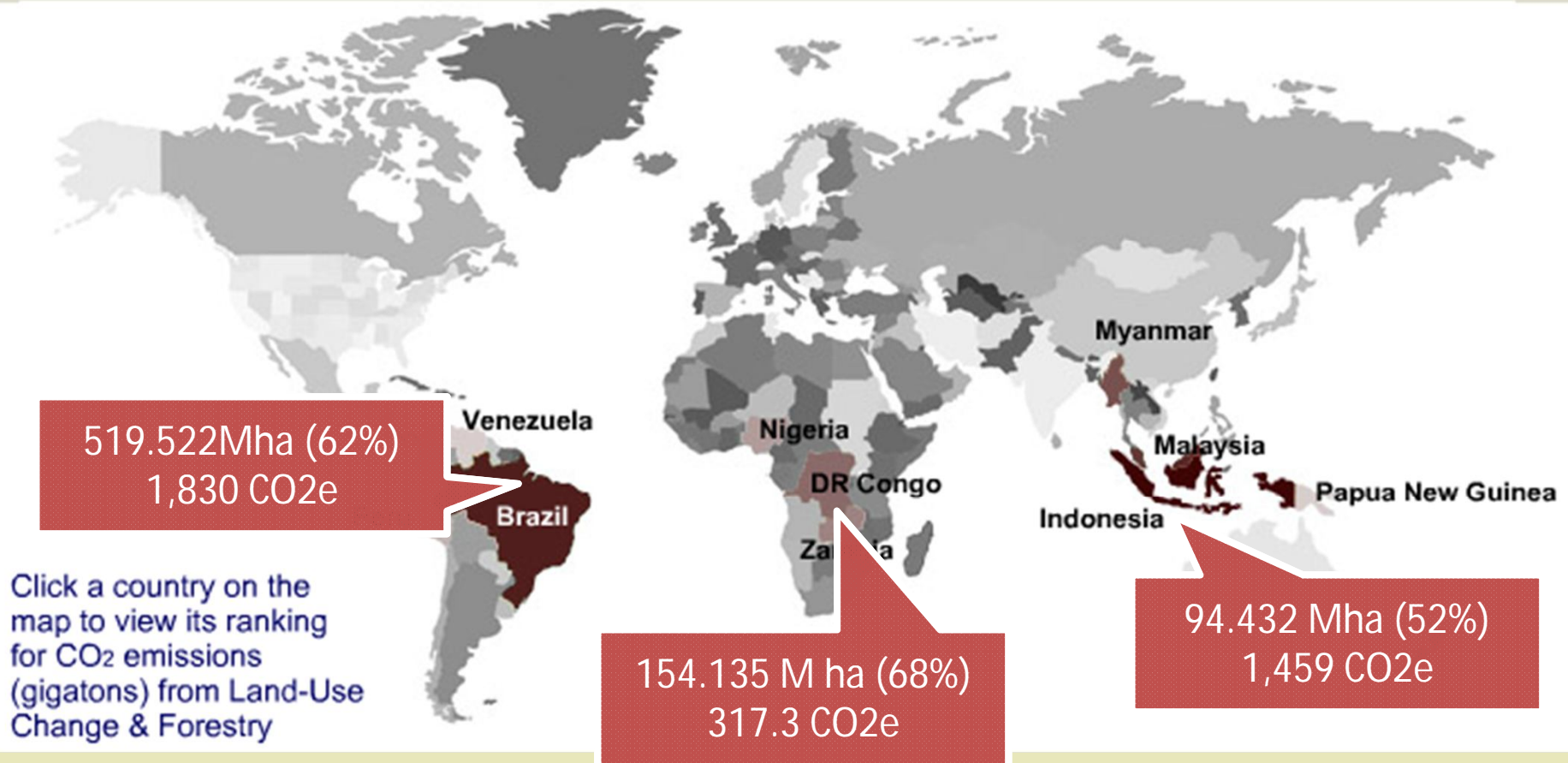
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# Why tropical forest is a matter?

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- **4 billion hectares** global forest cover (30% land)
- 45% world terrestrial carbon stored = **283gtC**
- tropical forest store **50%>** other forest type

# Why **Indonesia**?



## Greenhouse gas emissions (Carbon dioxide equivalent) by sector in 2005

	Energy	Electricity & Heat	Manufacturing & Construction	Transport	Other Fuel Combustion	Fugitive Emissions	Industrial Processes	Land-Use Change & Forestry	Total
Indonesia	338.9	125.3	93.1	73.9	38.7	8	16.9	1,459.0	1,814.8
Brazil	331.5	58.6	97.3	137.1	34.1	4.5	18.3	1,830.0	2,179.8
China	5,059.8	2,668.1	1,594.0	332.1	465.6	--	532.6	-47.3	5,545.1
Australia	387.5	243.1	46.5	79.1	18.4	0.4	4.5	--	392
USA	5,808.9	2,732.9	627.3	1,806.0	618.2	24.3	50.3	-117.1	5,742.1
European Union	3,273.3	1,249.7	541.6	834.6	644	3.5	101.8	--	3,375.1
World	26,400.1	12,335.8	5,230.1	5,369.0	3,270.9	194.2	1,172.5	5,376.2	32,948.8

Units: millions of tonnes.

Source: Climate Analysis Indicators Tool (CAIT) Version 7.0. (Washington, DC: World Resources Institute, 2010)

# REDD+

**“Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries”**

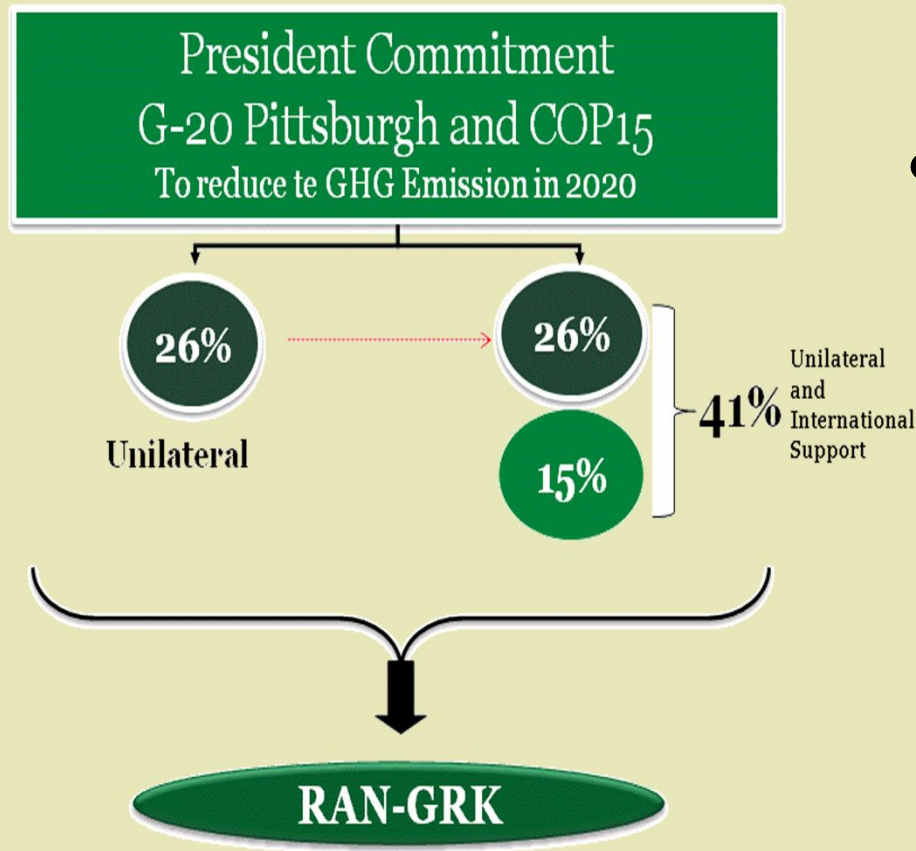


\*and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries

## UNFCCC – Article 4 – COMMITMENTS

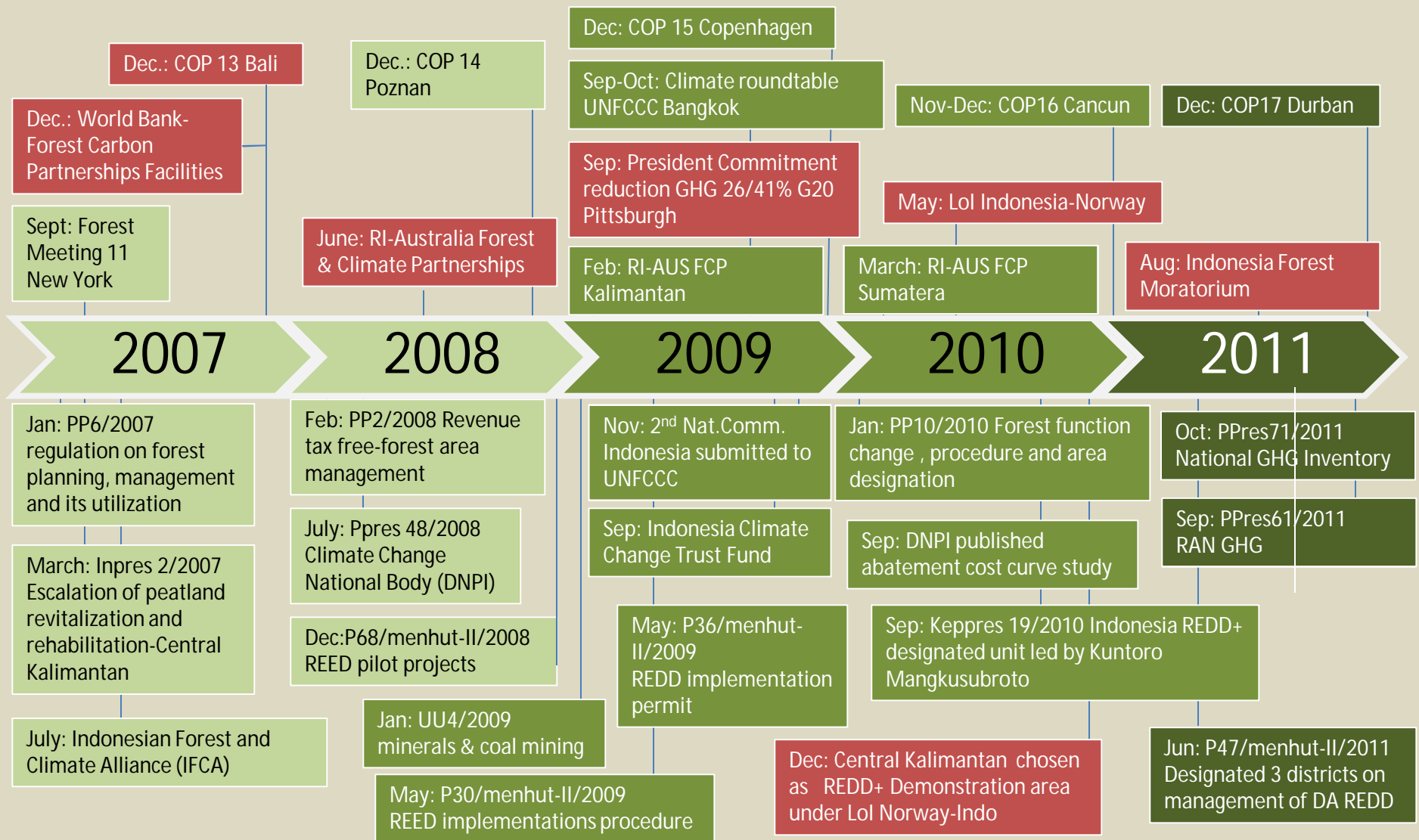
7. The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related **to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication** are the first and overriding priorities of the developing country Parties.

# Indonesia' Commitment



- By **2020** GHG would be reduced by **26%** against 2005
- Strategy of **26/7**
  - Then **+ 15%**

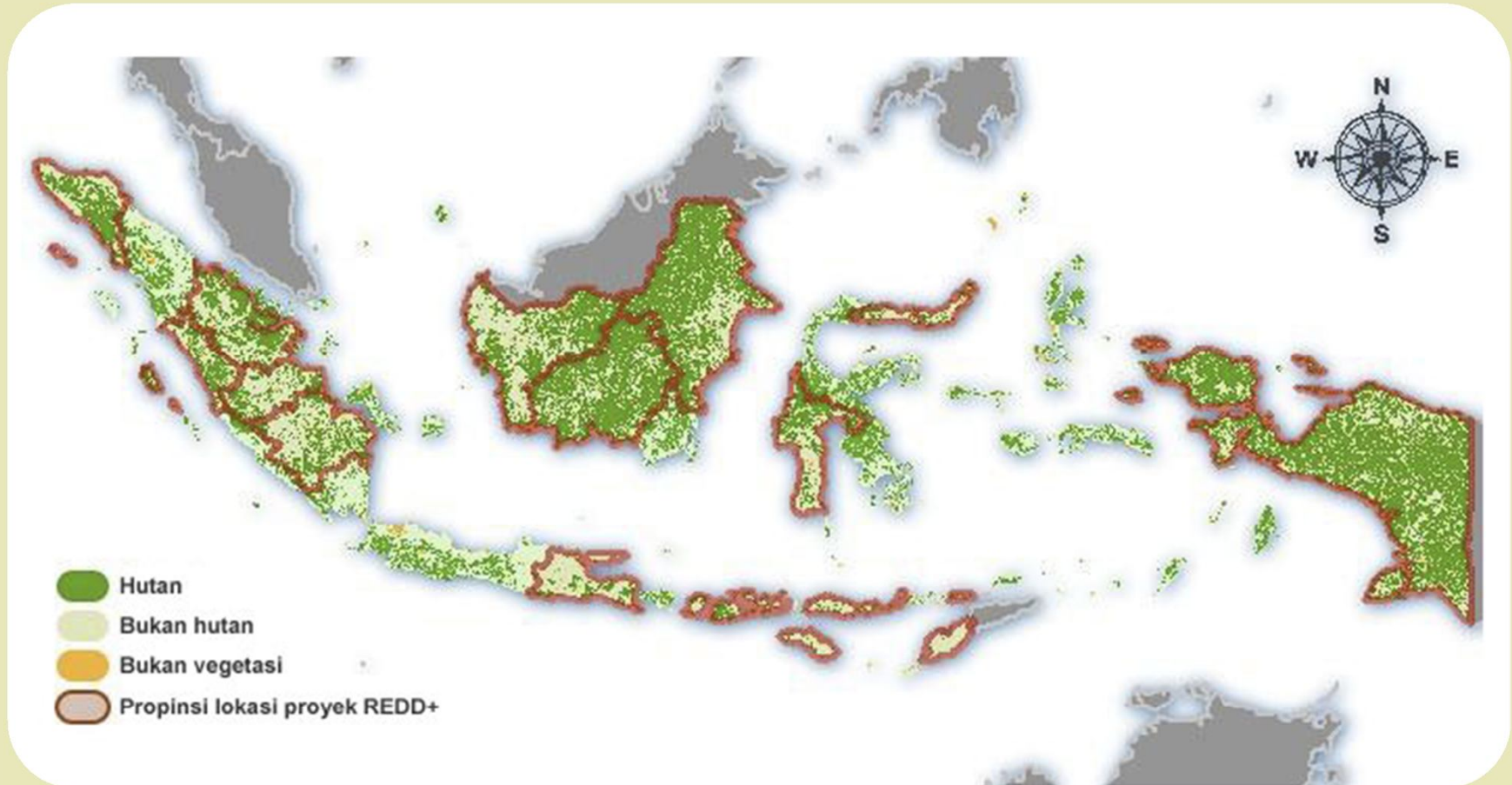
# The dynamic of REDD+ in Indonesia



Adapted from Global Comparative Study CIFOR – redd-indonesia.org cited feb.2012



# 44 demonstration projects on the ground

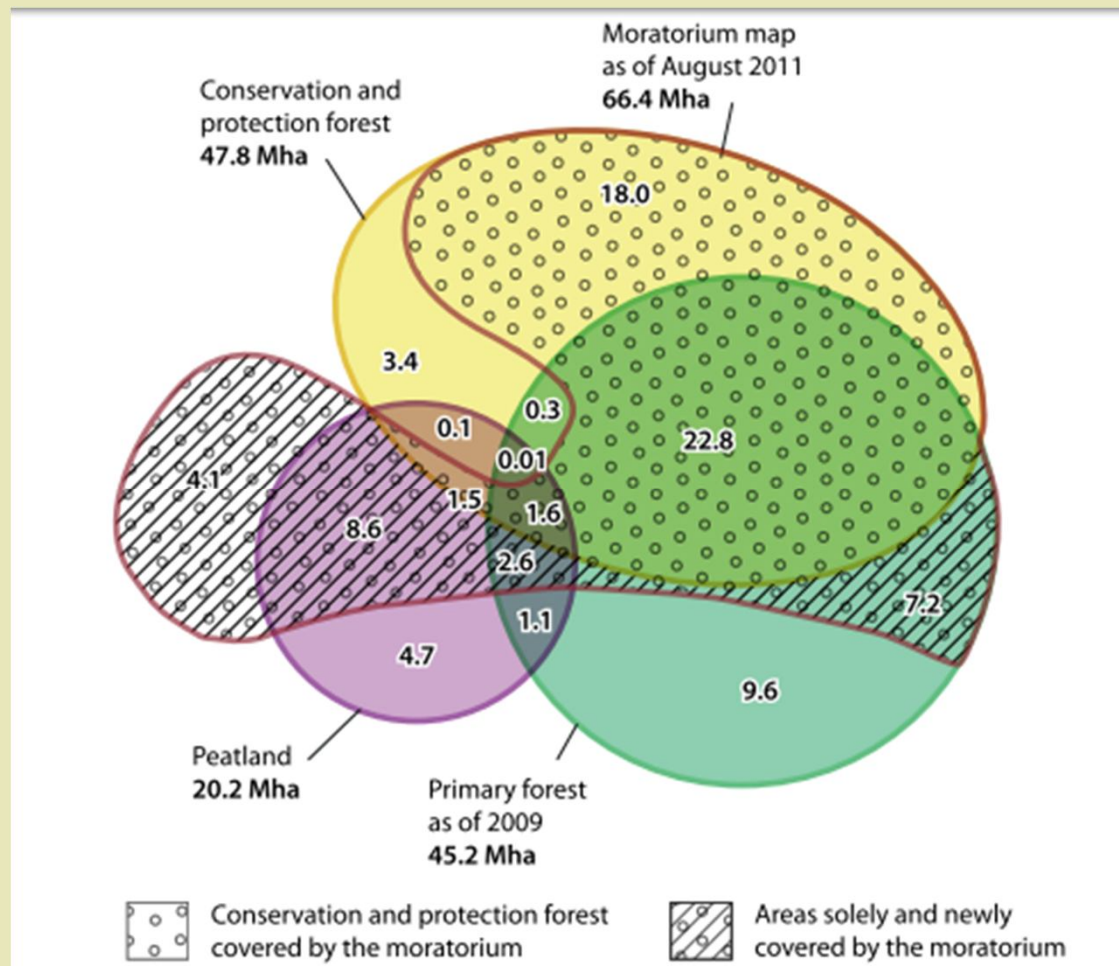


**Strategies:** AF: Reforestation, AD: Avoided deforestation, Adg: Avoided degradation, RS: Restoration



- Signed a **Letter of Intent (LoI) with Norway to jointly promote REDD**. The core agreed actions are
  - (1). Develop a REDD+ National Strategy;
  - (2). Establish a dedicated agency to implement the REDD+ strategy, including (MRV) of emission reductions and financial instruments for disbursing funds; and
  - (3). Develop and implement policy instruments and enforcement capability, including a 2-year suspension of all new concessions for conversion of peatland and natural forest areas to other uses.

# Indonesia's **Forest Moratorium**




- Total area solely and newly covered under moratorium is **22.5 Mha**;
- 7.2 Mha primary forest.
    - 2.6 Mha primary peatlands
  - 8.6 Mha secondary peatlands
    - 4.1 Mha neither primary forest nor peatland



# Promises and Opportunities

- Emissions Reductions; 26-41% reduction GHG means what?
- Carbon market- based solutions; incentive for preserving carbon/subsidies. **Could generate \$10-60 billion per year of payments to developing countries if deforestation were to be halved.**
- REDD+ much more than carbon;
  - Forest and Conservation Biodiversity (the spot of biodiversity)
  - Development opportunities through REDD+



# Challenges and Limitations

- Still in readiness process.
- Technical implementations issues;
  - Additionality
  - Permanence and Leakage
  - Coordination of Demonstration Projects
- Land tenure? Free Prior and Informed Consent (FPIC)\*  
-- benefit to local communities?
- Moratorium contra development
- Monitoring and Measuring, Reporting & Verification
- Carbon market mechanism



## REDD+ in Indonesia and **way forward**

- Indonesian policies to LULUCF and subsidies (taxes) interventions.
- Through general equilibrium model of Indonesian economy; INDONESIA E3-L (Economy-Equity-Environmental-Land) → further implementation of REDD+ is feasible at annual subsidy **cost ~US\$408 million** or **\$1.08**/ton of CO<sub>2</sub> emissions abated (Peter Warr and Arief A. Yusuf, 2011)

### **However...**

- When there is no possible carbon market mechanism in place..that would be possibly triggering further higher GHG emission through deforestation



## Why in “Hutan Nagari” ?

- Over 1,2 million hectare forest in Indonesia are community forest, Hutan Nagari is one kind of in West Sumatera Province
- 55,40 % forest area in West Sumatera Province are still in good condition which half of it belongs to community forest
- Support of local policies, i.e. Perda (Law) Nagari and communal land law.

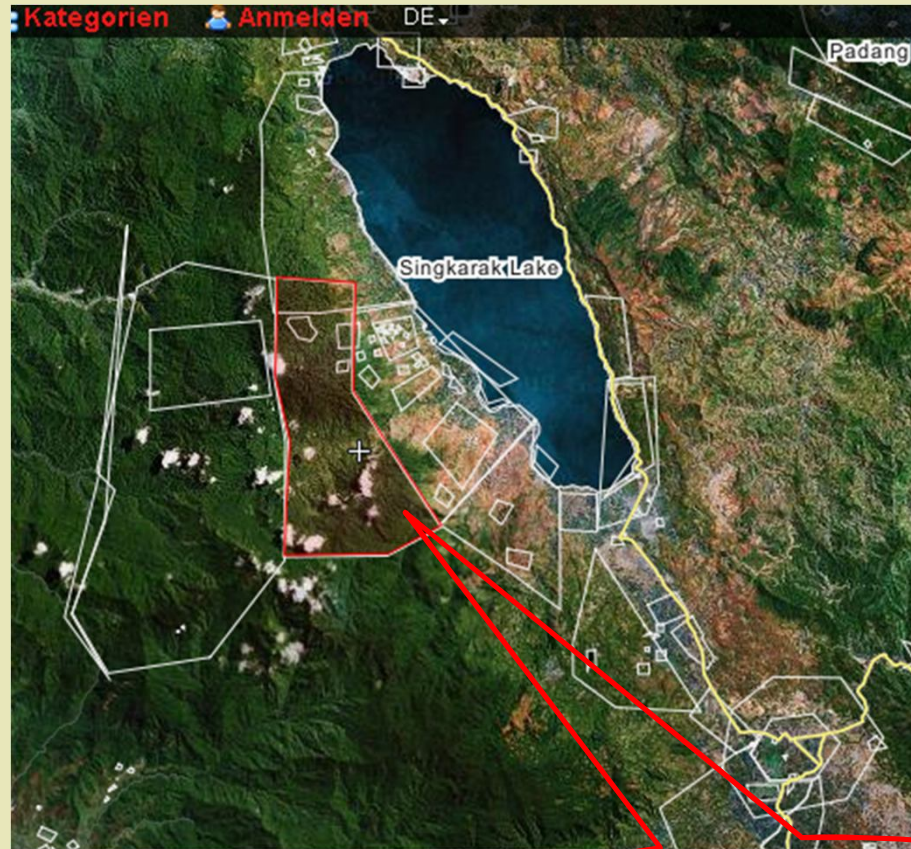


## Why in “Hutan Nagari”?

- 518 Nagari area which 57,17% of the community still have direct connection with the forest.
- Village Forest policy combined with its local traditional ruling (Adat) and local wisdom.
- Zonation : Forbidden, Stock, Used
- Important roleplay of gender : NTFPs



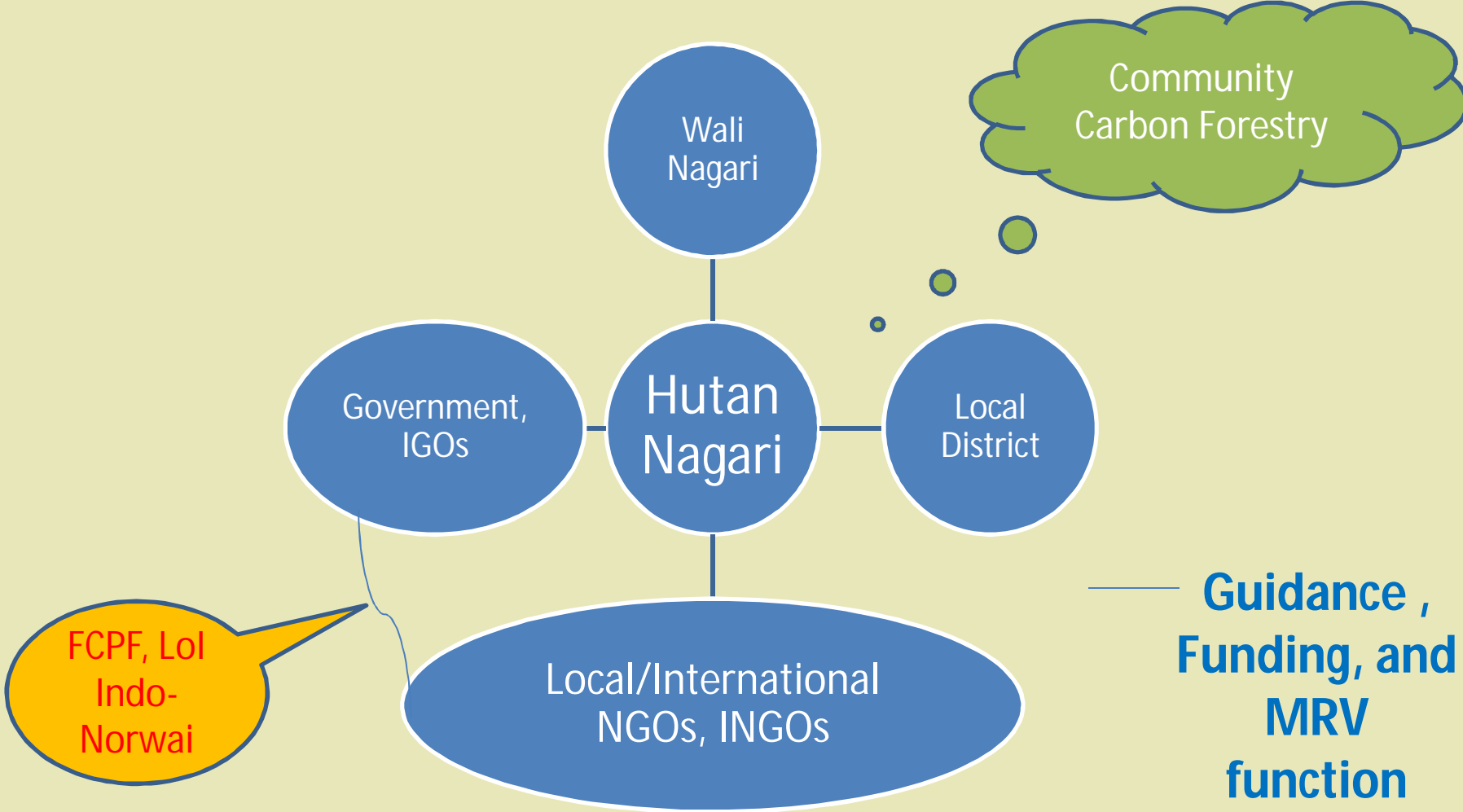
# Location of Hutan Nagari



**Hutan Nagari  
Panninggahan**

Source : Wikimapia


# Partnership in Hutan Nagari





# Opportunities in Hutan Nagari

- 250.000-500.000 ha of Hutan Nagari will legally binding as pilot project of REDD+ for the next 5 years → Nagari Simanau and Nagari Alam Pauh Duo
- Carbon market based solutions; incentives mechanism for preserving carbon
- Multiple benefit sharing
- Sustainable forest and community empowerment (community based forest management)



## Challenges in Hutan Nagari

- Technical implementation (Additionality, Permanence and Leakage) → **participatory mapping & Provincial Strategy**
- Monitoring - Measuring, Reporting and verification (MRV) → **transparency report**
- Investment barriers and credit facilities → **compensation mechanism**
- National policies vs local policies **according to land tenurial**
- REDD+ vs sustainable livelihood in the forest (**due to probability lack of income**)

# Picture of Hutan Nagari



- “A REDD Programme that focuses only the carbon risks losing the forests for the trees –IUFRO-- ”



# Picture of Hutan Nagari

Community Empowerment  
(Cattel form)



Roleplay of Gender  
(Nursery Form)



**“ Local People hold the key to the  
Healthy Forest”**



# Conclusions

- REDD+ initiative and its indicative mechanism is well responded in Indonesia as it resulted in **policies** establishment on GHG emission abatement and its massive **demonstration projects**.
- Hutan Nagari as newly acknowledged demonstration area is **opening the opportunity** for **additional benefit** to the community, yet facing **high challenges to put its system in place**.
- As somehow the challenges and limitations to **REDD+ implementation remains high (unclear incentives and market mechanism)**, which would possibly drive to the worsening of the (particularly tropical forest) resources due to its utilization for development.

# Forest area in West Sumatera

No.	Forest Type	Area (Ha)	Percent (%)
1.	Nature Reserve Area	769.000	24,62
2.	Limited Production Forest	233.000	7,46
3.	Production Forest	360.000	11,52
4.	Converted Production Forest	161.000	5,15
5.	Other Function	1.600.000	51,23
	Total Areas	3.123.000	100

650.000 ha in  
Solok Selatan

Potention of  
Community  
Forestry by  
Hutan Nagari

Data source : West Sumatera Province Forest Agency