



Lessons on
jurisdictional
REDD+ from Berau
District, East
Kalimantan



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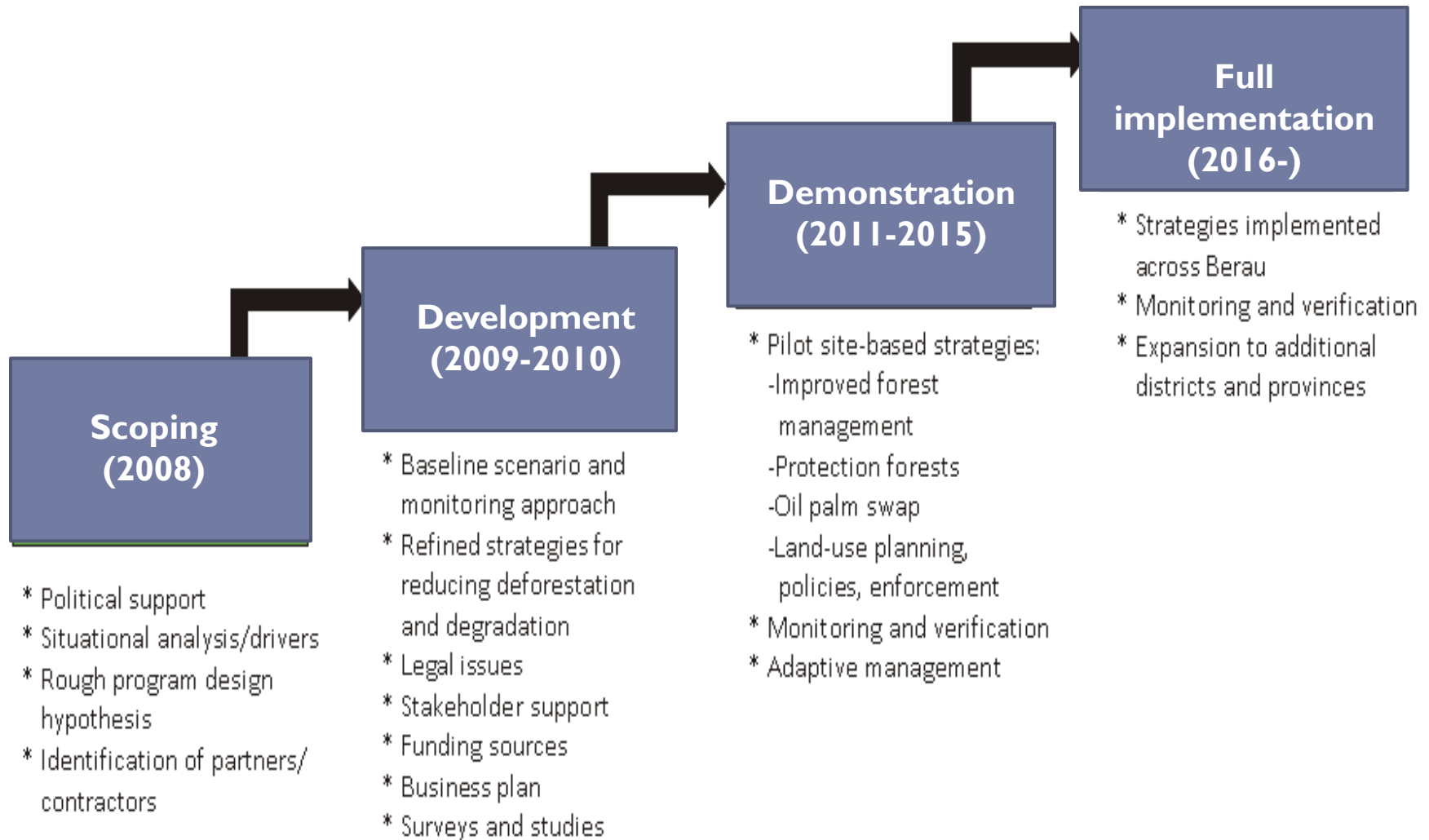
Outline

- ▶ **Overview of REDD+ in Berau**
 - ▶ Phasing, program design and objectives
 - ▶ Jurisdictional approach
 - ▶ Integrating REDD+ into development plans and licensing
 - ▶ Developing replicable site-level investments
 - ▶ Progress to date
- ▶ **Linkages to national level**
 - ▶ General approaches and key programmatic linkages
 - ▶ Challenges in linking to national and international levels
 - ▶ Next steps in linking Berau program to national level

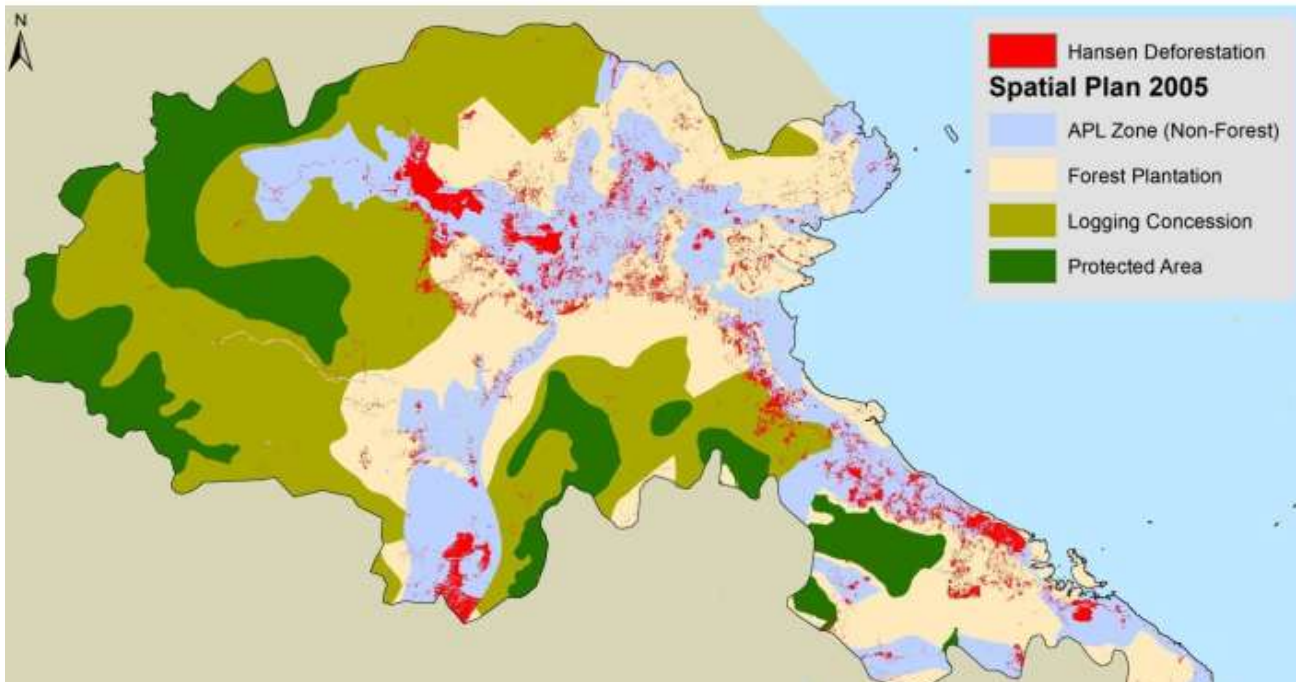


BERAU PROGRAM OVERVIEW

Phases in development—now in Demonstration Phase



Sources of emissions in Berau 2000-2010



Spatial plan zones (2005) are color coded for the district of Berau. Deforestation activity based on Hansen et. al. (2012) from 2000-2010 is given in red.

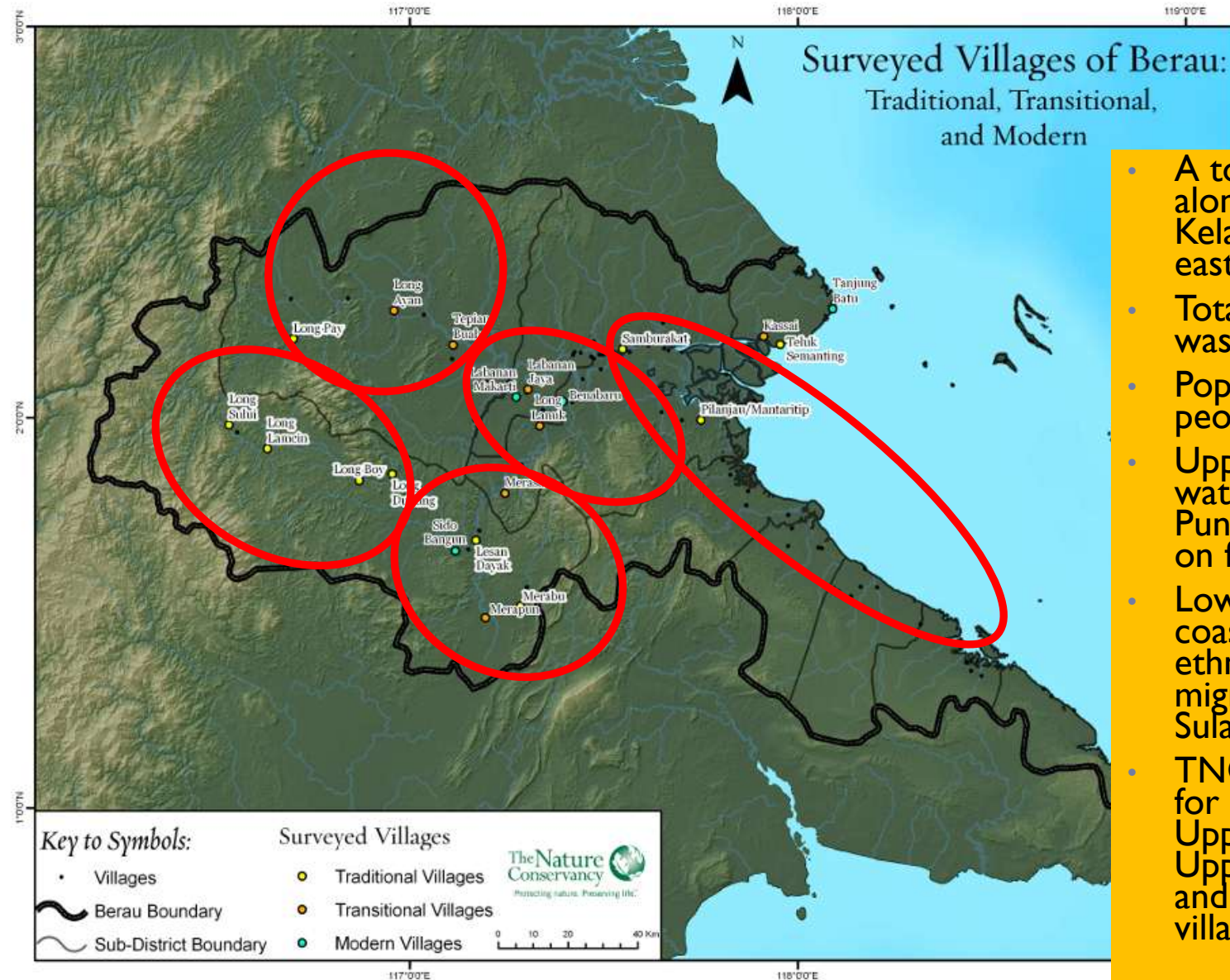
Pattern of forest loss mostly aligned with legal conversion of forests and legal logging.

Table 1. Emissions and area change by zone (2005 Ministry of Forestry Spatial Plan).

Land Use Zones*	Area Deforested / Logged (Ha/yr, mean 2000-2010)	Area Secondary Forest Regrowth (Ha/Yr, mean 2000-2010)	Gross Emissions (Mt CO2/yr, mean 2000-2010)	Gross Sequestration (Mt CO2/yr, mean 2000-2010)	Net Emissions (Mt CO2/yr, mean 2000-2010)	Total Net Emissions 2000-2010 (Mt CO2)	Percent Emissions
Protected Area (HL) deforestation	42	525	0.03	0.07	-0.03	-0.34	0%
HTI deforestation	2,861	3,381	2.23	0.43	1.80	18.03	17%
HPH deforestation	777	1,021	0.61	0.13	0.48	4.77	5%
APL Zone deforestation	7,144	2,149	5.58	0.27	5.31	53.06	51%
Legal Logging degradation (HPH)	11,302	3,721	3.04	0.12	2.92	29.24	28%
Total	22,126	10,797	11.50	1.02	10.48	104.76	

- ▶ 51% of emissions from deforestation in “non-forest” area
- ▶ 28% of emissions from legal logging in natural forest concessions
- ▶ 17% of emissions from deforestation in timber plantation licenses

Communities in Berau vary substantially; BFCP is developing “model villages” to refine approaches in each of the zones identified



- A total of 107 villages along two main rivers, Kelay and Segah, and the east coast.
- Total population in 2009 was 175,000 people.
- Population density of 4-5 people/km².
- Upper Segah and Kelay watersheds are home of Punan (highly dependent on forests) and Gaai.
- Lower Segah, Kelay, and coastal areas have higher ethnic diversity: IPs and migrants (Java, Bali, Sulawesi, etc.).
- TNC has been working for almost a decade in Upper Segah (5 villages), Upper Kelay (6 villages), and Lower Kelay/Lesan (5 villages).

Berau Forest Carbon Program (BFCP) Goals for 2015:

- 800,000 hectares of forestland under effective management
- 10 million tons of CO2 emission
- Conserving critical watersheds
- Protecting the habitat of 1,500 orangutans
- Creating improved economic outcomes for local communities
- Generating experience for national/regional/global application



Joint Working Group



Ministerial Working Group

Ministry of Forestry, Ministry of Finance, Planning Agency, Indonesia Climate Change Council, etc

Provincial Working Group

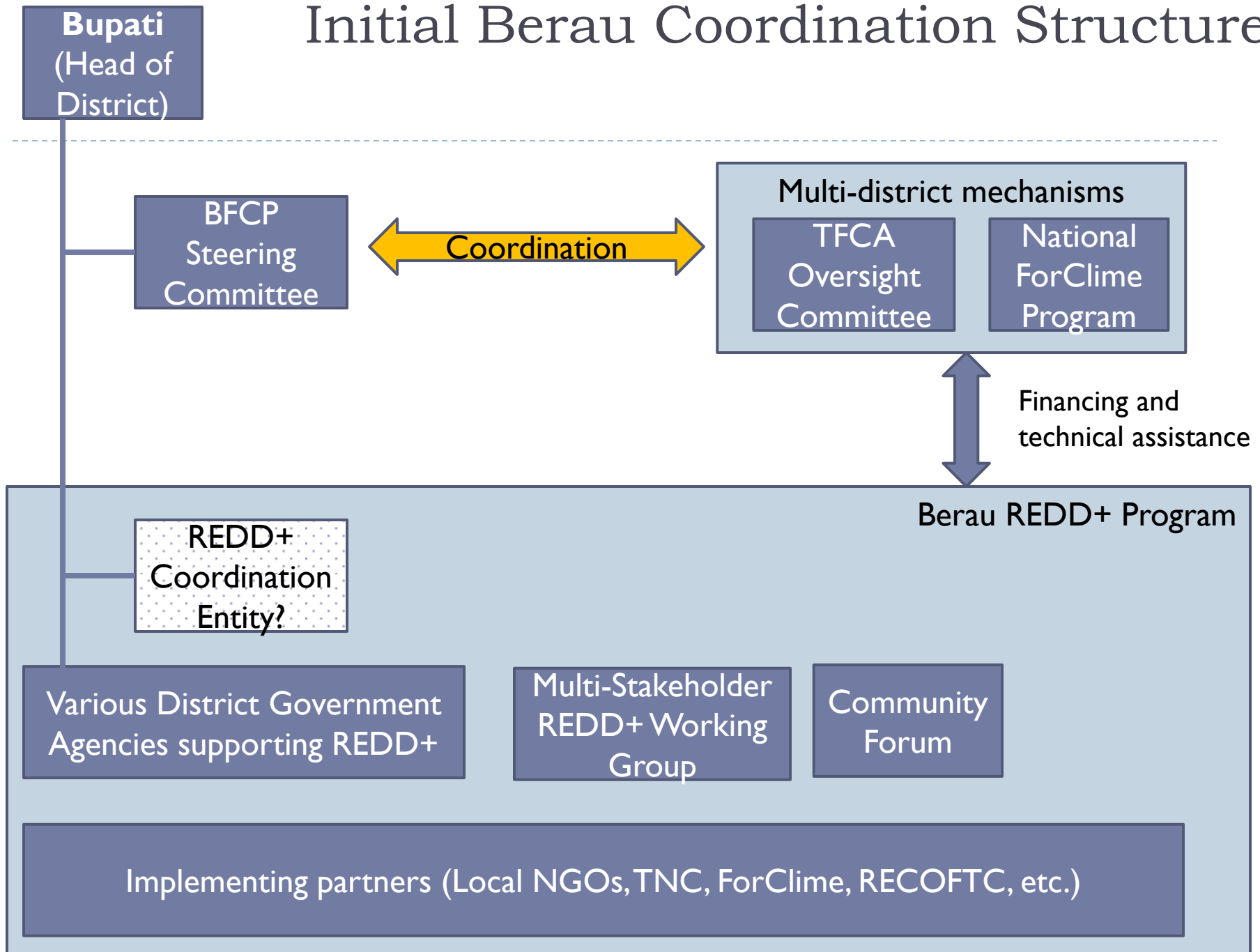
Various government agencies, universities, NGOs, other stakeholders

District Working Group

Various government agencies, communities, private sector, NGOs, other stakeholders



Initial Berau Coordination Structure



Overall approach: site level performance agreements within district program

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BUNDLING MAINTAINS OPTIONS FOR CARBON FINANCING

Bundling simplifies program management in light of uncertainties about carbon finance arrangements internationally. Approach could be adapted to:

- Carbon market with company buyers or government buyers
- Fund-based public financing from outside Indonesia
- Internal GOI payment/incentive transfer mechanism

1

JURISDICTIONAL PROGRAM CREATES ENABLING CONDITIONS

- District-wide carbon accounting
- Development planning and licensing
- Financial mechanisms & upfront finance
- Policy work

3

CUSTOMIZED AGREEMENTS

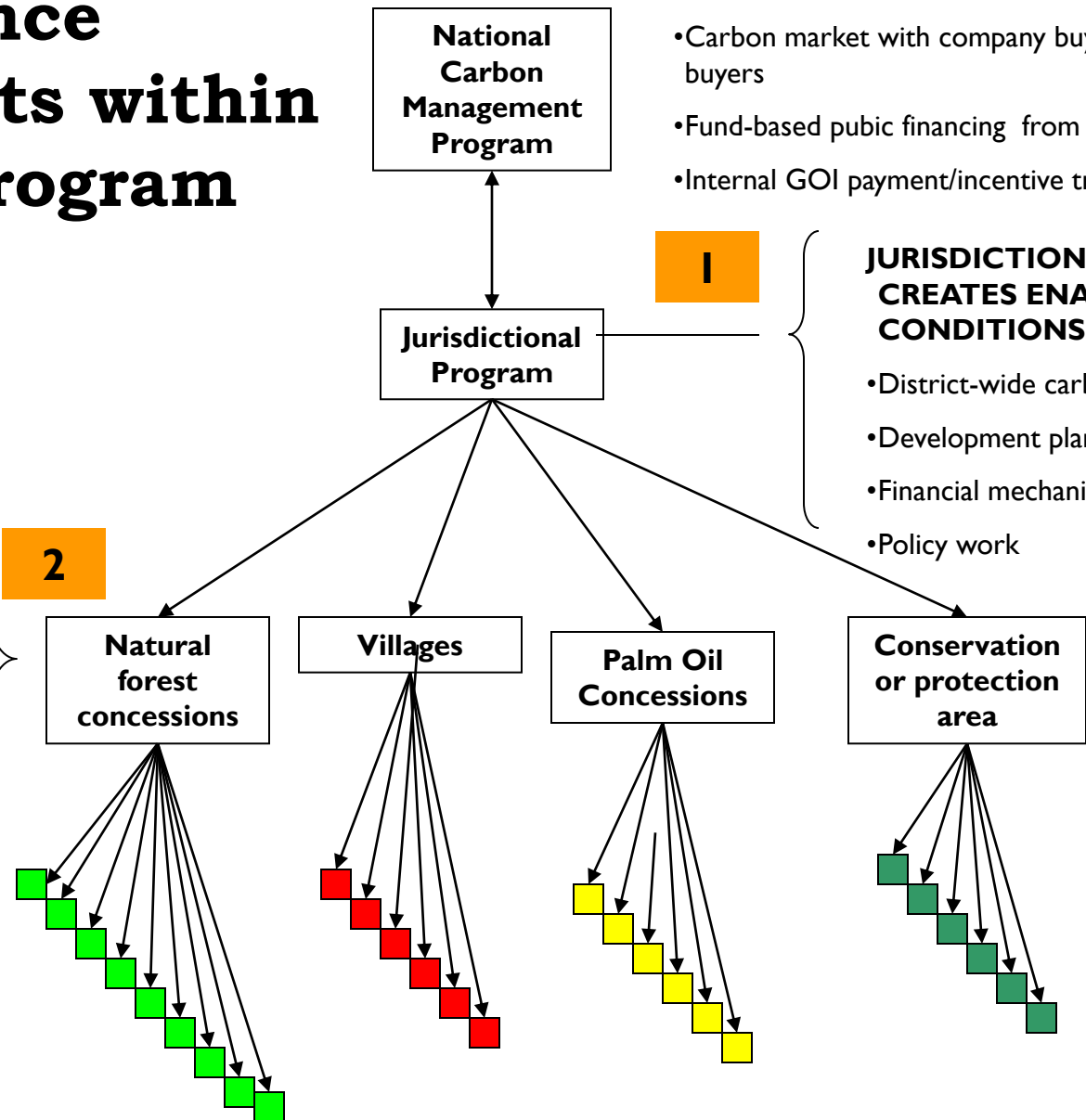
- Customized agreements are negotiated with each land manager
- Streamlined performance monitoring

2

MODEL INCENTIVE AGREEMENTS AND PROGRAMMATIC FINANCING FOR EACH PROJECT TYPE

Customized for each sector. Common elements

- Manager commitment to achieve performance targets (e.g. FSC certification)
- Technical assistance delivered efficiently
- Financial incentives, including operations financing and performance payments
- Streamlined regulatory context



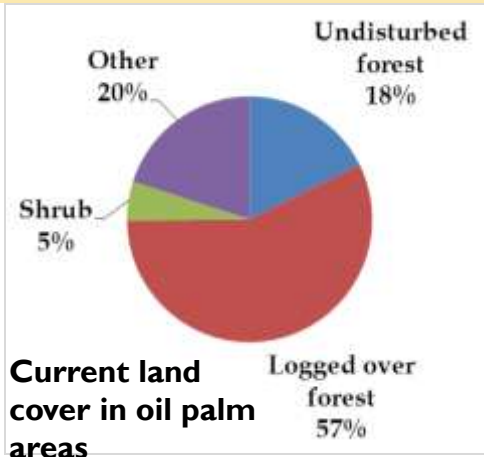
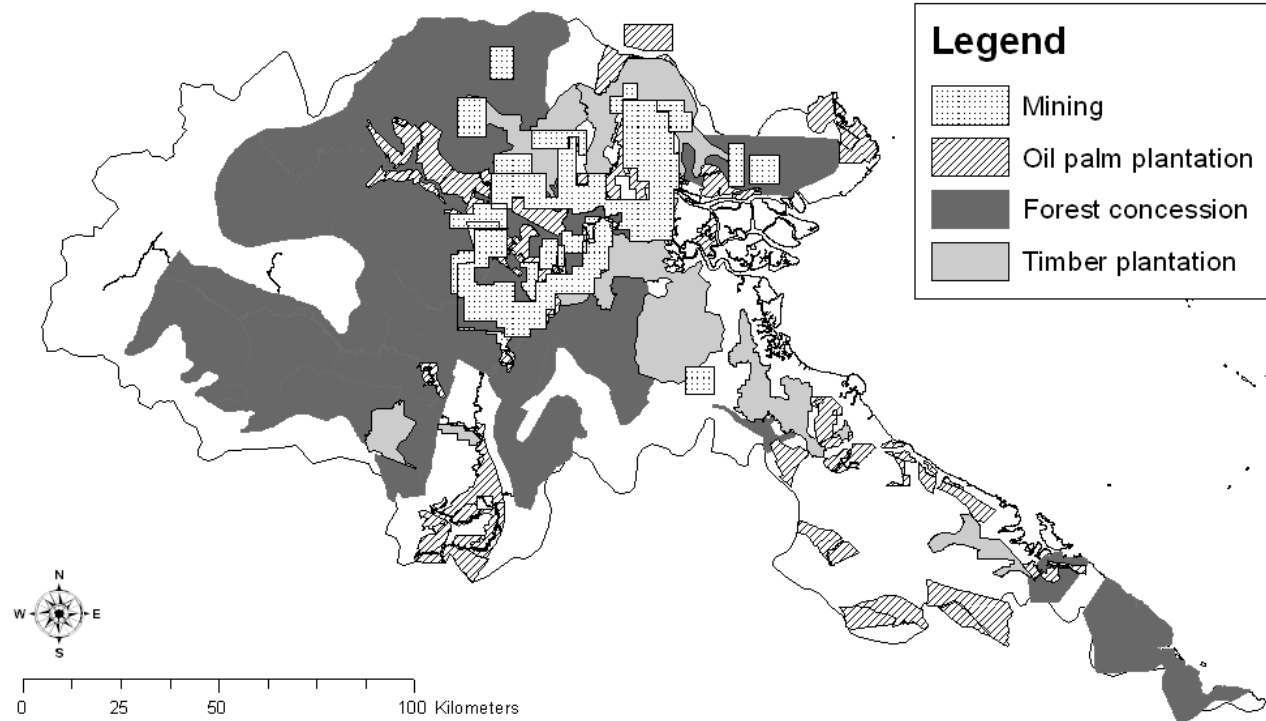
There are numerous benefits of avoiding project-level crediting within a jurisdictional program

Benefit	Short-term	Long-term
Does not require full agreement on carbon rights ownership in Indonesia	X	
Does not require long-term tenure certainty at beginning of the program	X	
More flexibility in design of site-level incentive agreements to address multiple objectives	X	X
Lower transaction costs compared to site crediting	X	X
Easier nesting within national program under various funding scenarios (market; fund-based)	X	X
Simpler to design and deliver programmatic approaches for technical assistance	X	X
Genuine alternative for Indonesia to test during REDD+ pilot phase	X	



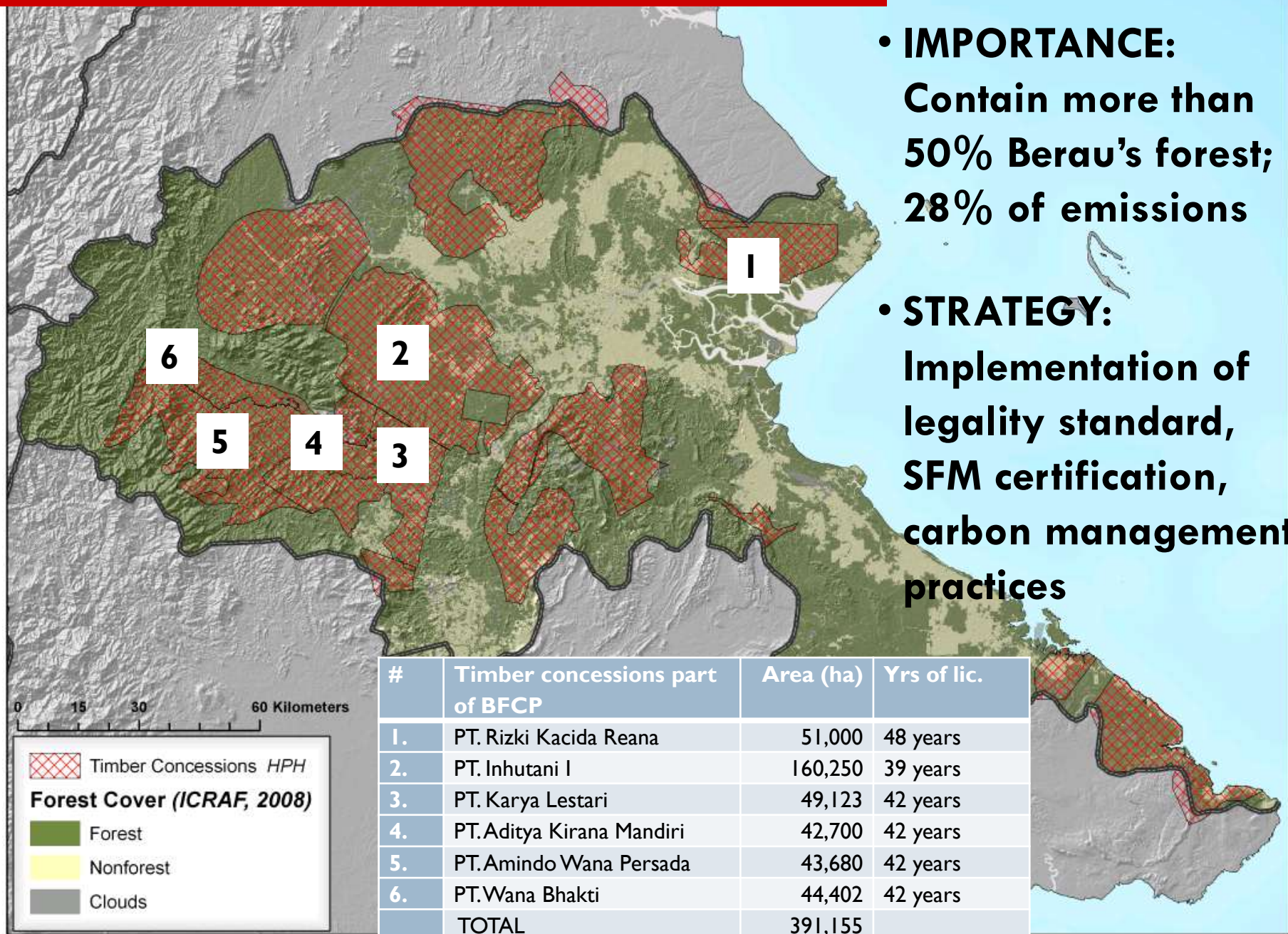
Integrating REDD+ into development planning and licensing is fundamental to a jurisdictional approach

- Needs to be done for cross-sectoral mechanisms (spatial plan, mid-term development plan).
- Needs to be done for sectoral planning and licensing.
- Requires giving clear value proposition to jurisdiction for lost development benefits.



- The planned land-based activities covers over 70% of Berau area which consist of: forest concession (42% of Berau area), timber plantation (10%), oil palm concession (9%) and mining concession (8%)
- Total area licensed for oil palm exceeds 200,000 ha, more than 75% of the licensed area is still forested.

SELECTIVE LOGGING CONCESSIONS



- **IMPORTANCE:**
Contain more than **50% Berau's forest**; **28% of emissions**
- **STRATEGY:**
Implementation of **legality standard**, **SFM certification**, **carbon management practices**

Developing a replicable site-level investment by linking Reduced Impact Logging to carbon emissions

Logging Efficiencies

- Reduce average haul road width to $\leq 25\text{m}$
- Replace bull-dozers with winch skidding.
- Do not fell hollow or defective trees.
- Improved skid trail planning
- Improved felling techniques

“Set Asides”

- Restrict logging in High Conservation Value Forests (~10% of concession area)
- Do not log in 20-meter riparian buffer zones.
- Do not log on slopes $> 40\%$

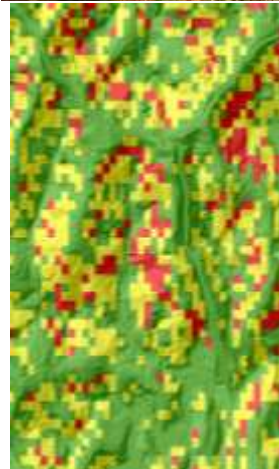
2.4 tC/ha

8.0 tC/ha

7.5 tC/ha

2.8 tC/ha

4.9 tC/ha



SUMMARY OF APPROACH

- 1) Define specific “RIL-C” practices that measurably reduce emissions
- 2) Sign incentive agreements with companies that commit them to perform those practices
- 3) Deliver technical assistance to support the implementation
- 4) Third party auditing of the field implementation of RIL-C practices plus satellite monitoring
- 5) Deliver performance payments

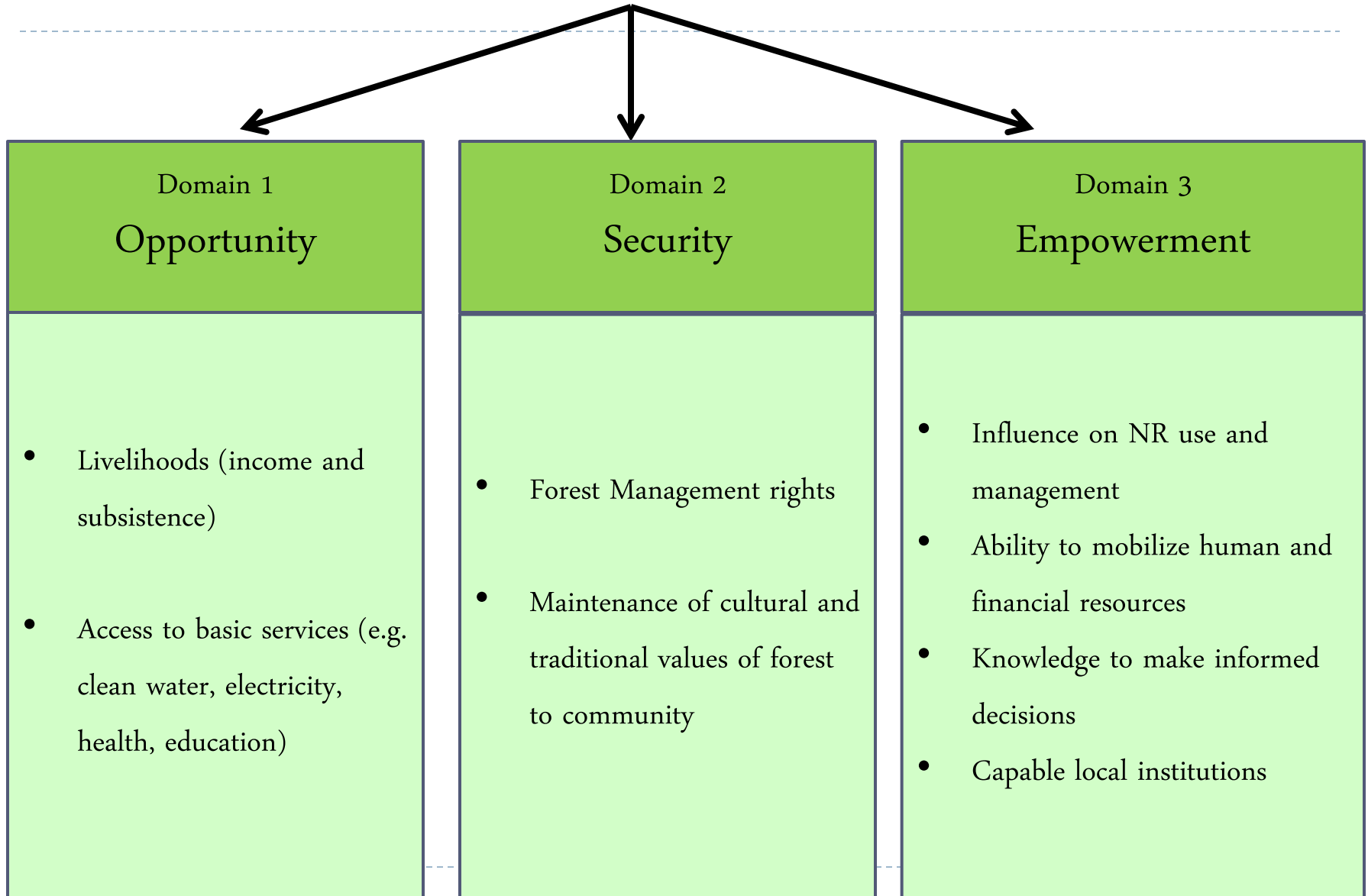




BFCP STRATEGIES FOR COMMUNITY ENGAGEMENT

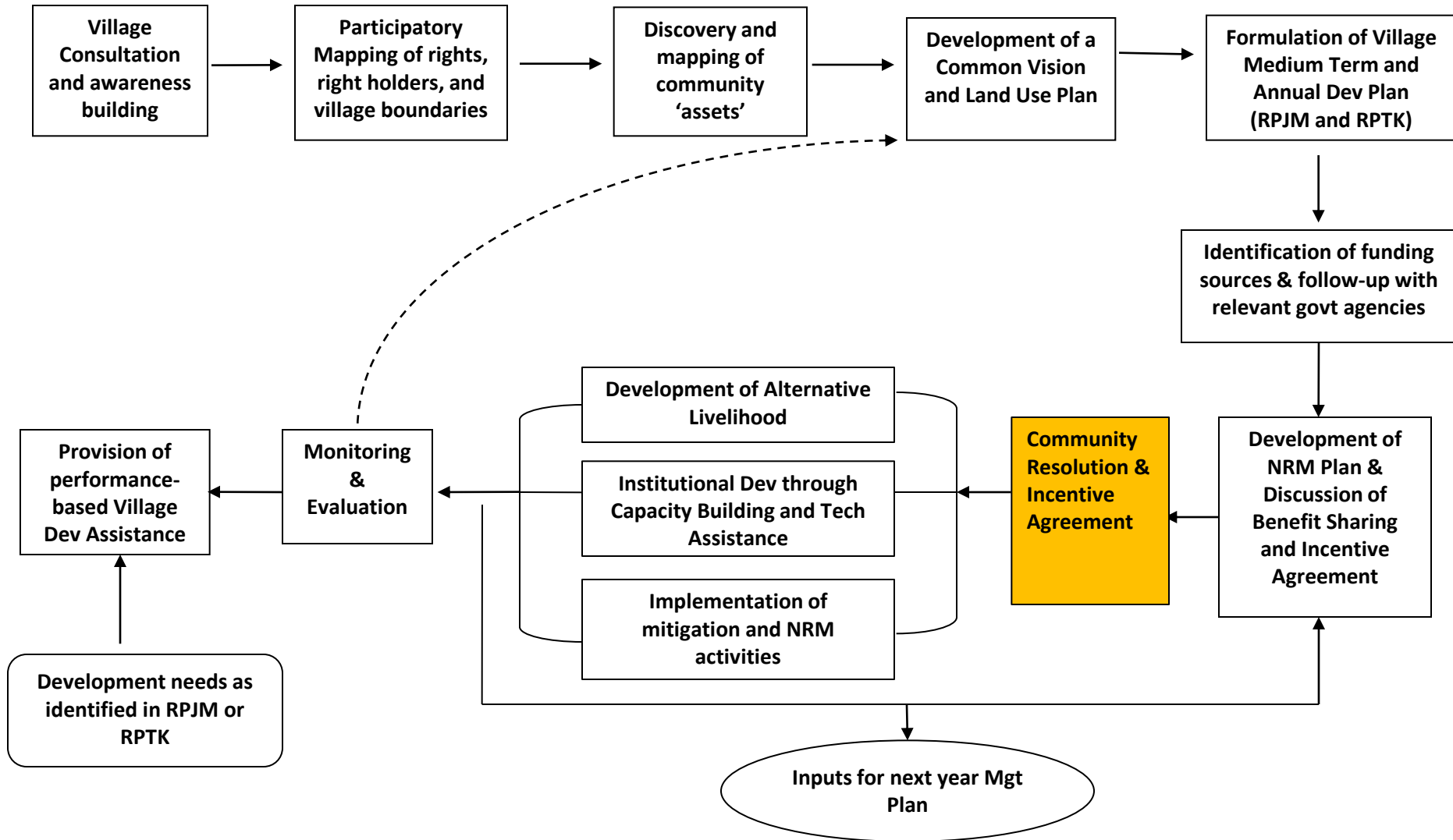
- **Program-wide:**
 - Community and CSO consultations in the development of BFCP Community Strategy (led by the World Education).
 - Community participation in BFCP decision-making processes (Community Forum; linkages to Steering Committee).
 - Develop fair and transparent benefit sharing mechanism.
 - **Site-level**
 - Focus on 20+ villages in Kelay & Segah watersheds plus 2 coastal villages.
 - Develops 'models' in 4 villages.
 - Replicate models in 16 more villages
-

Human Well-Being Framework for BFCP



Adapted from the World Bank's Attacking Poverty framework

METHODOLOGICAL & OPERATIONAL FRAMEWORK (village engagement)





BFCP village engagement strategy links to the existing government planning framework, but lengthens the planning horizon and provides additional support for natural resource management and livelihoods

Visioning and Planning

- **Long-term vision for natural resources**
- **Medium term management planning**
- **Institutional development**

Input-based payments in incentive agreements

- Management and Institutional Development
- Mitigation and carbon enhancement
- Livelihood development ('compensation' and incentives)

Performance payments

- **Output-based payments** made upon the maintenance or improvement of desirable state of natural resources.
- **Outcome-based payments** made upon the production of desirable environmental outcomes

Progress to date

- ▶ **Program governance:** Steering Committee established; REDD+ Working Group; Community Forum
- ▶ **Analytical base:** Completed in-depth analysis of production forests, profitability of different land uses, HC VF across district, drivers of DD, laws and regulations across scales, spatial data discrepancies, etc.
- ▶ **Program design:** BFCP strategic plan developed based on extensive multi-stakeholder, multi-level consultation. Shaped provincial-level REDD initiative in East Kalimantan.
- ▶ **Positioning:** Recognition of BFCP as one of main national REDD Demonstration Activities; Shaped East Kalimantan Low Carbon Growth Strategy; strong alignment of BFCP with nat'l and prov. REDD strategies
- ▶ **On the ground:**
 - ▶ Work with logging concessions and community managed areas covering nearly 500,000 hectares;
 - ▶ Initiation of 775,000 hectare Forest Management Unit (KPH) pilot with Ministry of Forestry
 - ▶ 4 “Model villages” initiated with livelihood programs and mitigation commitments
- ▶ **Financing:** German ForClima; USG Debt for Nature (TFCA); Norad; TNC
- ▶ **Learning:** national-level BFCP lessons learned workshop series; substantial input to national REDD+ strategy and process; substantial inputs to East Kalimantan LCGS;



LINKAGES TO NATIONAL LEVEL

Is Berau a seed crystal or a seed bank? Or both?

- ▶ A **seed crystal** is a small single crystal that can be used to grow a large crystal through exact **replication of the whole** crystal.



- ▶ A **seedbank** is a source of **individual seeds** for development elsewhere as needed or as opportunities arise.



Strategies for linking to national used in BFCP development

- ▶ Formal linkages through REDD+ regulations (Ministry of Forestry DA) for information sharing
- ▶ Testing existing national-level strategies (KPH; One-map initiative; SVLK; ISPO; Village Forests)
- ▶ Developing new strategies that are relevant elsewhere (RIL-C; Village REDD+)
- ▶ Facilitating district-level input in provincial and national policy dialogues
- ▶ Testing mechanisms for scaling and/or replication
- ▶ Documenting and sharing lessons



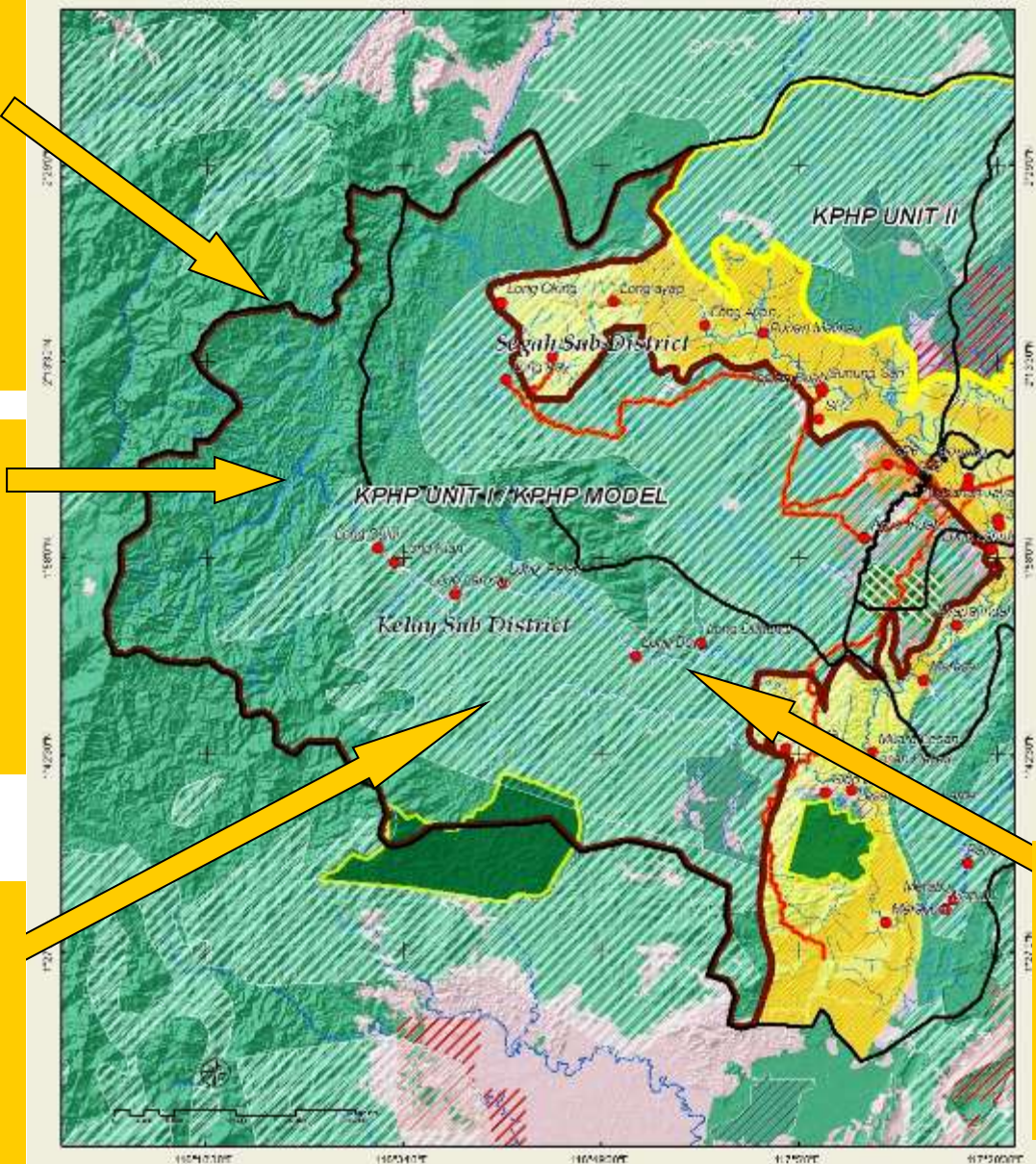
Forest Management Unit pilot of institution for managing large areas within the forest estate.

Protection forest: developing models of effective management

Logging concessions: legality verification; SFM certification

Berau program is supporting various national-level forest-sector reforms, many of which are linked together by a 775,000 hectare **Forest Management Unit pilot**

Communities: "Village Forest" licenses; land tenure clarification



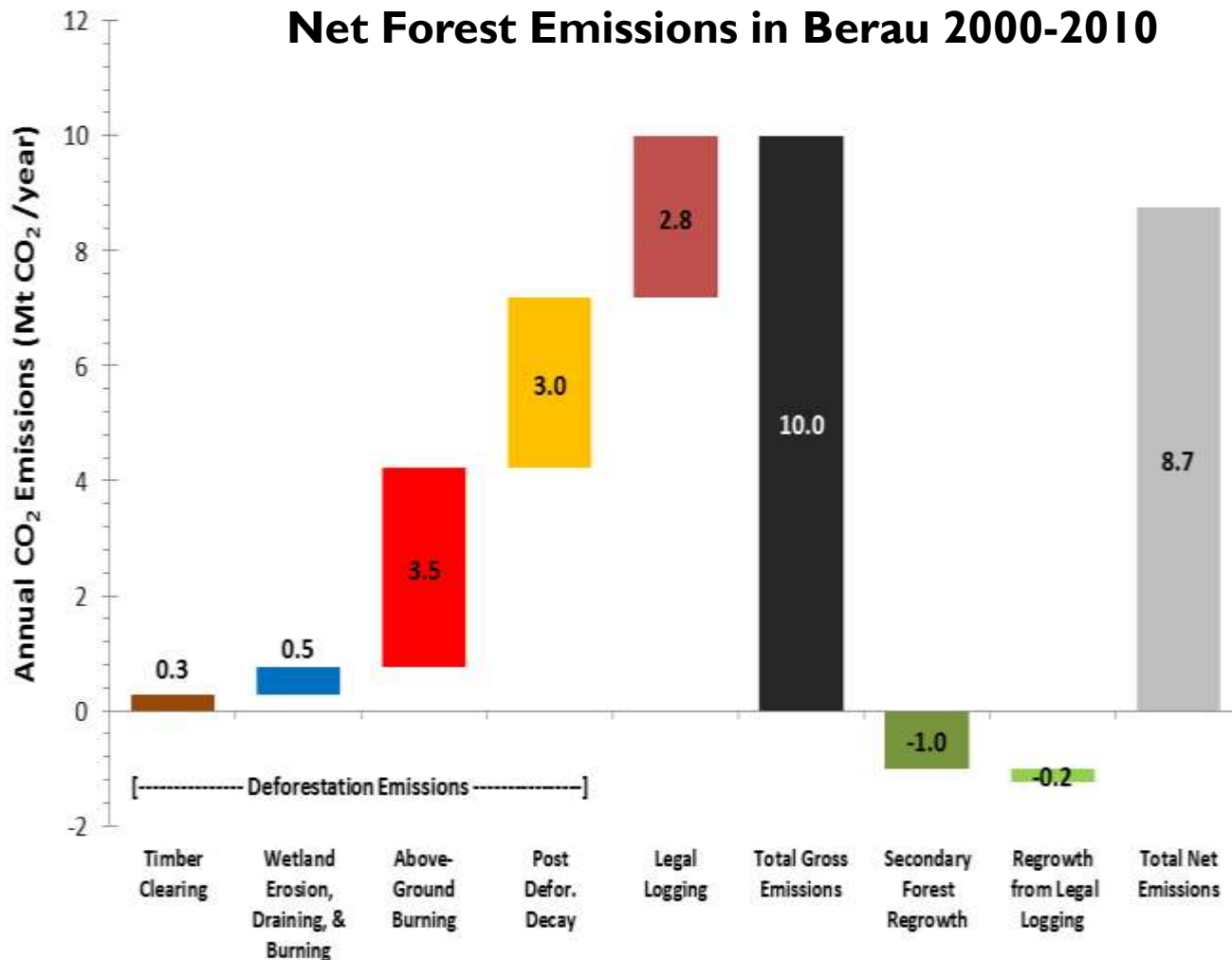
LEGEND :

- Village
- Water Body (Stream, River, Lake, Coastline)
- District Boundary
- Sub-District Boundary
- Village Boundary
- Roads
- Protected Area
- STREK Plot
- KPHP Unit I / KPHP Model
- KPHP Unit II
- CONCESSION**
- Logging Concession
- Industrial Under Plantation Concession
- Mining Concession
- Lake Crip Concession
- LANDCOVER 2007**
- Forest
- Non Forest

* Silvicultural Techniques For The Regeneration Of Logged Over Rain Forest In East Kalimantan, PIR (1998-2008)

Substantial analysis of historical carbon emissions and approaches to developing Reference Emission Levels

Net Forest Emissions in Berau 2000-2010



Collaboration:

- The Nature Conservancy (TNC),
- World Agroforestry Centre (ICRAF),
- Woods Hole Research Center (WHRC),
- Winrock International,
- University of Maryland,
- CCROM,
- Universitas Mulawarman,
- University of Florida,
- US Forest Service,
- Daemeter Consulting

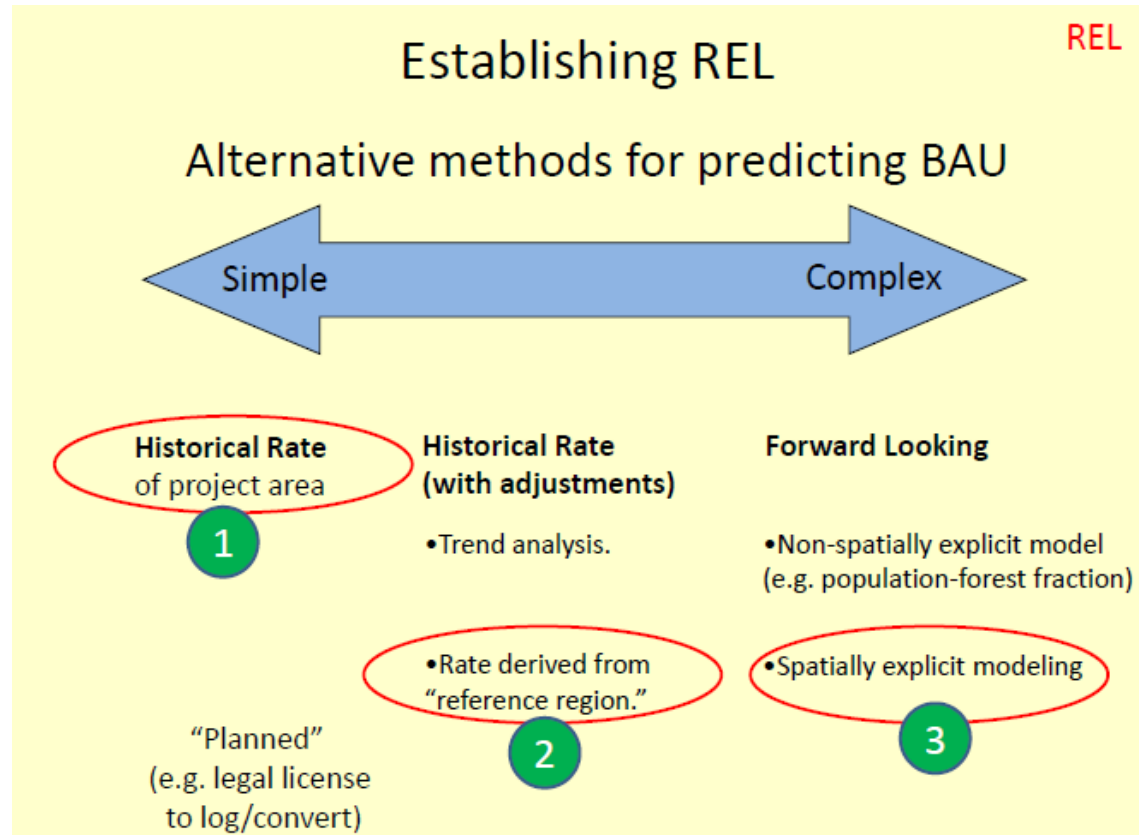
Jurisdictional Reference Emission Levels are fundamental but cannot currently be finalized

It is **not currently possible to “finalize” a jurisdictional REL** in Indonesia:

- ▶ No agreed methods
- ▶ No agreed approval process
- ▶ Ministry of Forestry REDD+ regulations do not allow jurisdictional programs

Important to **develop REL options** for stakeholders to consider. To date:

- ▶ Strict historical
- ▶ Trend
- ▶ Modeled (multiple methods)



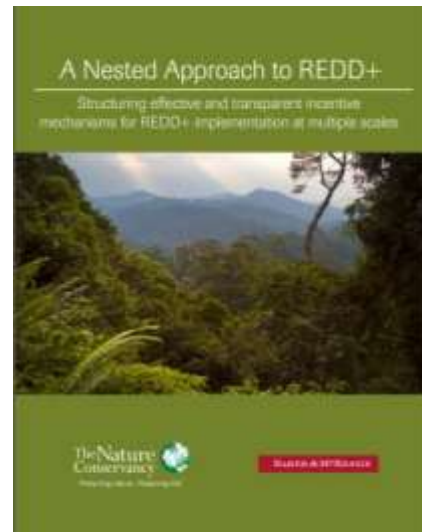
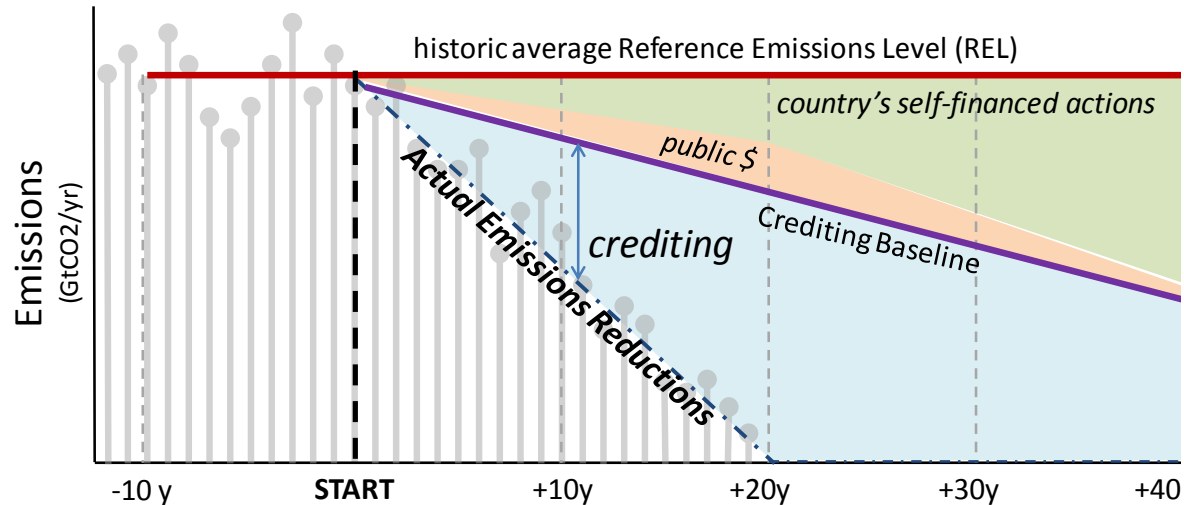
Analysis of options for RELs conducted

Estimate of emission reduction potential in Berau

Area	Area deforested/ logged (ha/yr)	Area forest regrowth (ha/yr)	Net emissions (Tons CO2/yr)	Strategy	Yearly Potential Emission Reduction
Natural forest concessions	12,079	4,742	2,940,000	Reduced Impact Logging; collaborative mgt w/ communities (build to 30% reduction over 5 years)	520,000
Areas zoned for agriculture	7,144	2,149	4,430,000	Improved siting of oil palm licenses; protection of forested areas for community management, hydrological value, carbon (target: 14,000 ha reduction in conversion for plantations)	1,904,000
Protection forests	42	525	-50,000	Improved enforcement; community management	Minimal
Timber and pulp plantations	2,861	3,381	1,420,000	(no strategy yet)	
Total	22,126	10,797	8,750,000		2,424,000

Challenges of linking to national-level: basic questions on REDD+ have not yet been answered

- ▶ Will Indonesia try to have a national-level crediting framework?
- ▶ How will sub-national emission reductions be trued up to the national?
- ▶ How will NAMAs, donor funded initiatives, and crediting be reconciled?
- ▶ Which category would BFCP emission reductions be included in?
- ▶ Who owns the carbon in the forests in Indonesia?



Joint paper by TNC and Baker & McKenzie addresses many of the key issues in nesting REDD+ programs

Long-term REDD+ financing mechanisms not in place: national governments should provide performance-based incentives to sub-national programs

A performance agreement could initially be based on non-carbon outcomes such as described below . The program would track deforestation and degradation as well over this period, but not make payments based on this. Could transition to payments based on reduced deforestation, degradation and associated carbon emissions as methodologies are established.

Result indicator	District	Site
# of forest management units established (or # hectates under effective management?)		
% forest cover in newly allocated oil palm, mining, timber plantation concessions (goal = low forest cover)		
# hectares of forest concessions with legality certification or FSC (% of forest concession area with certification?)		
# hectares of oil palm plantations with ISPO/RSPO (% hect?)		
# hectares of forest area under formal management of communities		
# hectares of protection forest with high carbon stocks and high or medium threat under effective management		
# hectares of forested “non-forest” land suitable for agriculture maintained in natural forest for carbon storage		

Key Challenge: numerous REDD+/green development initiatives have contributed in Berau, but maintaining alignment of approaches is difficult

- ▶ Model KPH Berau Barat
- ▶ German Forests and Climate (ForClime) Program
 - ▶ GIZ Technical Cooperation
 - ▶ KFW Financial Cooperation
- ▶ Green East Kalimantan Program
- ▶ National and Provincial Greenhouse Gas Mitigation Action Plans
- ▶ US Tropical Forest Conservation Act debt swap
- ▶ Funding through TNC
 - ▶ Norwegian Agency for Development
 - ▶ Department of Agriculture Fisheries and Forests (production forestry)
 - ▶ German Environment Ministry? (oil palm)
- ▶ Other
 - ▶ The Asia Foundation
 - ▶ RECOFTC



Australian Government
Department of Agriculture, Fisheries and Forestry



The background of the slide is a collage of four images. Top-left: A person in a yellow shirt working in a field with a sign that says 'BANTUAN PERIKANAN P.T.H.'. Top-right: A 3D landscape model showing green hills, a river, and a settlement. Bottom-left: A dense forest. Bottom-right: A man in a black shirt holding a blue bowl of rice, standing next to a wooden crate with a 'TNC' logo.

National programs should provide coherent guidance to jurisdictional programs

▶ “Need to have”

- ▶ Approach to handling carbon rights (clarifying at least for demonstration phase)
 - ▶ Is there still a goal to have an integrated national accounting system? If so, need to be careful on allocating carbon rights
- ▶ Clear approach to District REL/MRV
 - ▶ Methodological requirements or options
 - ▶ Approval process

▶ “Nice to have”

- ▶ Overall readiness performance assessment
- ▶ Outline investment program packages for districts
- ▶ SES guidance for district programs
- ▶ Guidance for negotiation and development of commitments for jurisdictional programs

Need a formal readiness phase in Berau to prepare for district-level performance agreement

- ▶ Work with an appropriate national level entity to bring together key parties within jurisdictional program
 - ▶ At a minimum District Government, Provincial Government, key implementing institutions, major donors
- ▶ Key objectives
 - ▶ Align relevant plans/policies for jurisdictional implementation
 - ▶ FCPF Readiness documents/National REDD+ strategy/RAD-GRK/SRAP/BFCP plan/ForClime plan
 - ▶ Revised strategy and institutional arrangements
 - ▶ Stronger approach to district-level coordination
 - ▶ Revised overall program objectives
 - ▶ Agreement on jurisdictional carbon accounting approach
 - ▶ Program scenario/carbon crediting; REL approach
 - ▶ Frame commitments of various actors for enablers

Moving forward



THANK YOU