Emissions Reduction Program in Indonesia
A District-Wide Approach to REDD+

Presentation to the FCPF Carbon Fund
June 25, 2013

This is a draft presentation to solicit feedback from the FCPF Carbon Fund participants. The figures presented here are not final, nor have they been endorsed by the Government of Indonesia. Most of the information here is only indicative and should not be quoted.

Outline and Goals of the Presentation

Outline:

- REDD+ Readiness in Indonesia – current status

- Background and Rationale of the approach

- National Framework for the Program

- District-Wide REDD+ Programs

  - Berau and Kutai Barat in East Kalimantan

- Expected Emissions Reductions from the Program

Goals of this presentation:

- Request early feedback from the FCPF Carbon Fund participants on the proposed approach

- Ensure alignment with emerging FCPF methodological framework

- Start a dialogue with the FCPF Carbon Fund

REDD+ Readiness in Indonesia (I)

- **Ongoing REDD+ Readiness process**
    - Significant overall progress in REDD+ Readiness and in delivering REDD+ results
    - Mid-term progress review currently under preparation. R-Package expected by end of 2014
    - LoI signed with Norway in 2010. US$ 1 billion committed to REDD+ in Indonesia

- **National REDD+ Readiness Arrangements**
    - President REDD+ Task Force established in September 2010, led by UKP4 (President's Office), made up of 10 thematic Working Groups
    - Ministry of Forestry leads some key elements of the process
    - Establishment of a National REDD+ Agency under consideration by President

REDD+ Readiness in Indonesia (2)

- **National REDD+ Strategy**

  - Indonesia's high-level ambitions: RAN-GRK (National Climate Change Action Plan) - <u>26% / 41% overall emissions reductions by 2020</u>

  - National REDD+ Strategy officially adopted in Sep 2012

    - Anchored in in-depth analysis of drivers of DD and multi-stakeholder consultations

    - Vision: Indonesia carbon sink by 2030

    - Main pillars: (i) Development of REDD+ Agency, MRV institution and Funding instrument; (ii) Legal and regulatory reform; (iii) Paradigm shift and work culture change; (iv) Participatory process; (v) Strategic programs

  - National REDD+ Action Plan prepared

    - Actionable steps to implement National REDD+ Strategy

  - Provincial Strategy and Action Plan (PSAP):

    - 11 pilot provinces at advanced stages of preparing PSAP

  - Various ongoing Demonstration Activities

  - Moratorium on Primary Forest Conversion issued and recently extended

REDD+ Readiness in Indonesia (3)

- **REDD+ Implementation Framework**
  - Fund for REDD+ in Indonesia (FREDDI) under design:
  - Recent Regulatory advancements
    - Land / forest tenure clarification (Adat community rights, change in the definition of the State forest domain)
    - Forest Management Units (KPH) – Renewed push for its implementation
    - Emphasis on Fight against corruption
    - Legality in forest sector – VPA agreement signed
    - One Map Initiative
- **Social and Environmental Safeguards**
  - Principles, Criteria and Indicators for REDD+ Safeguards in Indonesia (PRISAI) – developed and adopted in a highly participatory way
    - 10 social and environmental principles
  - Safeguards Information System under design
  - Strategic Environmental and Social Assessment (SESA) led by National Council of Forests (DKN) to complement the previous two initiatives

REDD+ Readiness in Indonesia (4)

- Reference emissions level
    - National REL establishment progressing – data collection and methodology development
    - Draft RELs for 11 pilot provinces prepared
- National Measurement, Reporting and Verification System
    - Design document for a national MRV system prepared and under consultation
    - Data collection & capacity building at local level achieved
    - Vision is an MRV system that can:
        - Monitor deforestation nationwide at high frequency
        - Integrate technical and public information, including on governance

REDD+ Readiness in Indonesia (5)

- Challenges towards REDD+ remain, including:

  - Strengthen law enforcement and government capacity on the ground, including through deployment of KPHs

  - Continue to strengthen de facto recognition of local communities rights and further promote community management of forests

  - Establishment and operationalization of the REDD+ Agency: expected to clarify overall institutional framework for REDD+

  - Agreement on a pipeline of initiatives to be supported by FREDDI

  - Clarify benefit sharing rules for REDD+ activities

  - MRV system and REL to be fully developed, including at decentralized level (Provinces and Districts)

ER-P link to the National REDD+ Process

- **REDD+ Strategy.** District Programs will directly contribute to implementing the National REDD+ Strategy on the ground
  - The selection of the Districts itself will be based on the alignment of District Program with the National REDD+ Strategy and the Provincial REDD+ Strategy
- **REL and MRV**
  - District-level RELs should contribute to the establishment of a national-level REL
  - National MRV system would be used to monitor the Program, and District-level activities would feed into the MRV system
- **Registry**
  - The Program activities will be recorded in the national registry system
- **Funding**
  - The investment needs and performance based payment (Phase 2) of these programs are expected to be supported by FREDDI as one of funding source
- **Readiness process**
  - The Program design is expected to contribute to overall Readiness by creating capacity at national and local levels, and addressing some open questions in different contexts (REL, MRV, etc.)

A District-Wide Approach to REDD+ in Indonesia

Objective

- Contribute to Indonesia's GHG emissions reductions targets by rewarding those Districts (*Kabupaten*) with potential to be expanded into provincial level that demonstrate leadership in achieving REDD+ goals

Instrument

- In the short-term, invest in Districts that demonstrate commitment to the REDD+ agenda through several instruments (Local budget/APBD, FREDDI, GEF, FCPF Readiness, FIP, etc.);
- In the medium-term, promote performance-based payments against emissions reductions

How would it work?

- Jurisdictional approach (provincial and district) a part of REDD+ National Strategy
- A **National Framework** is developed to set <u>minimum criteria</u> to select Districts, <u>technical and methodological</u> guidance and a <u>financing mechanism</u> to fund the District-wide Programs.
- **District-wide Programs** address drivers of deforestation and forest degradation through *policy interventions* and *multi-sectoral investments* across the landscape working with a broad set of stakeholders. District Coordinating Entity in charge of implementing its REDD+ Strategy (policies & investments)

Why a District Approach to REDD+ in Indonesia?

- **Substantial scale**:
  - Berau : 2.2 million ha of dense forests, 10 million tCO2e emitted / year
  - Kutai Barat : 2.4 million ha of dense forests, 8.2 million tCO2e emitted / year
  - Districts with large area under carbon-rich peatland – ie, Kapuas in Central Kalimantan
- **Policy making.** Kabupaten/District has decision making power on land use; whereas Provinces act as coordinators
  - Authority to propose spatial planning
  - Licensing authority for concessions (Palm oil, mining)
- **Reward good behavior on the ground**
  - Such a Program will seek to reward those Districts showing some level of leadership on REDD+
  - This is expected to cause a 'race to the top' effect, where the Kabupaten compete with each for the promotion of environmental sustainability
  - Test fiscal transfer payments, targeted incentives system (i.e. Regional Incentive Mechanism)
- **Scale** at which FCPF Carbon Fund payments could make a real difference
  - ER-P focus on Phase 1 – testing a concept to be mainstreamed into national policies!
- **Expedite REDD+ implementation** on the ground **and ER generation** by building on existing initiatives at District level. Technically **more feasible** level of intervention.

ER-P Implementation Strategy

- Incremental approach: The Program will be rolled out in incrementallly

  - Step 1: 3 Districts to be targeted *(not yet selected!)*

    - The criteria for the selection of these Districts will be decided in a participatory way
    - Potentially the Districts should be in the same Province to increase coordination

  - Additional steps until a significant part of the country surface can be covered

- National entity in charge of ensuring coherence of approach, synergies, knowledge management and dissemination, facilitating TA to participating Districts, etc.

- The ER-P presented to the FCPF Carbon Fund refers to Step 1 of the Program (3 Districts)

  - Expected to test a concept that can be scaled-up through other mechanisms (FREDDI. Regional Incentive Mechanisms etc.)

District-wide Program
Example: Berau District (East Kalimantan)

WHY BERAU?

- **2.2 million hectares; ~75% forest cover; ~10 million tons annual CO_2 emissions**
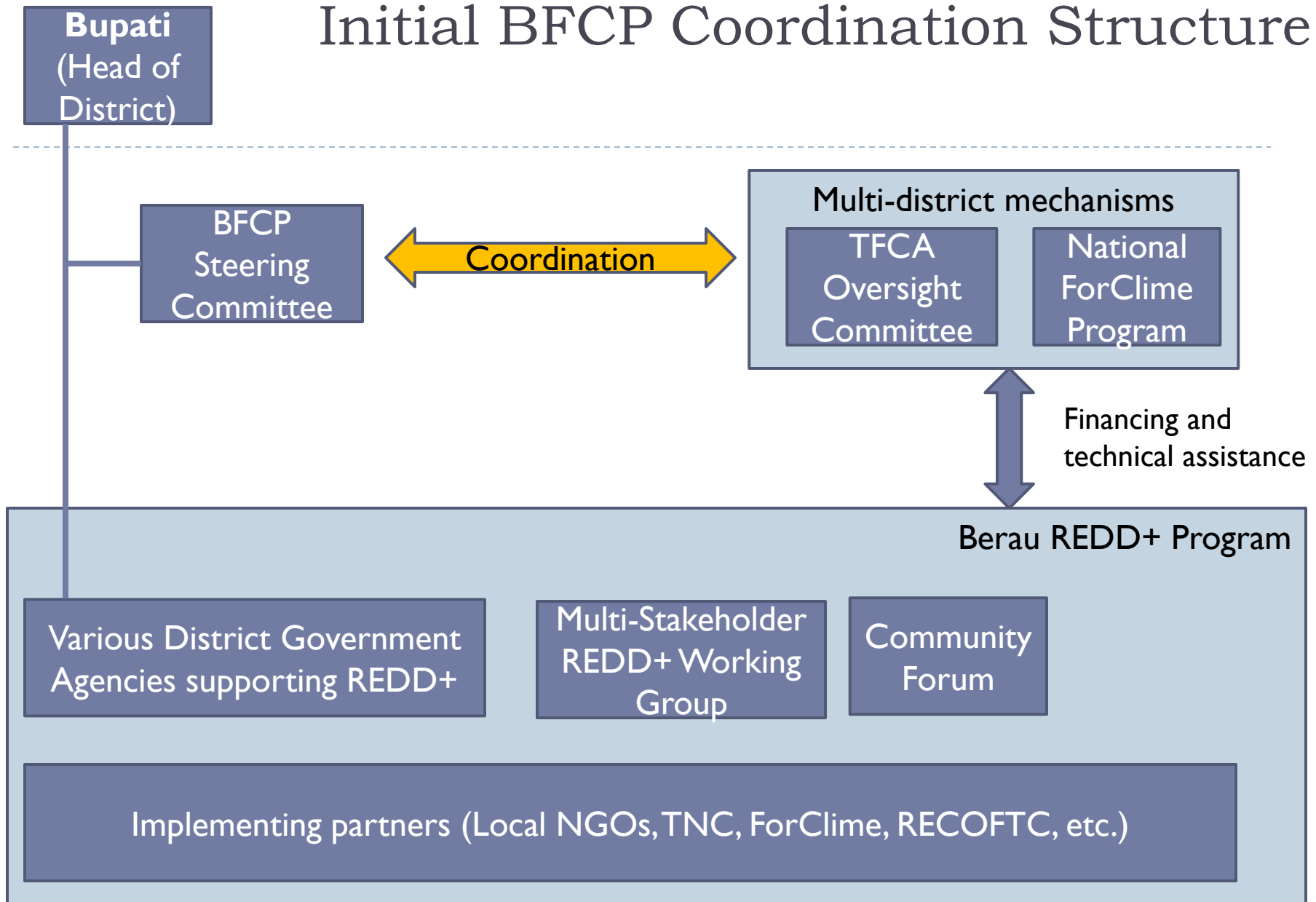
- **High biodiversity**

- **Local government commitment**

- **Programs to build on (logging concessions; local communities)**

- **Reward local actors for years of engagement in forest conservation**

Initial BFCP Coordination Structure

Bupati (Head of District)

BFCP Steering Committee

← **Coordination** →

Multi-district mechanisms

TFCA Oversight Committee

National ForClime Program

↕ Financing and technical assistance

Berau REDD+ Program

Various District Government Agencies supporting REDD+

Multi-Stakeholder REDD+ Working Group

Community Forum

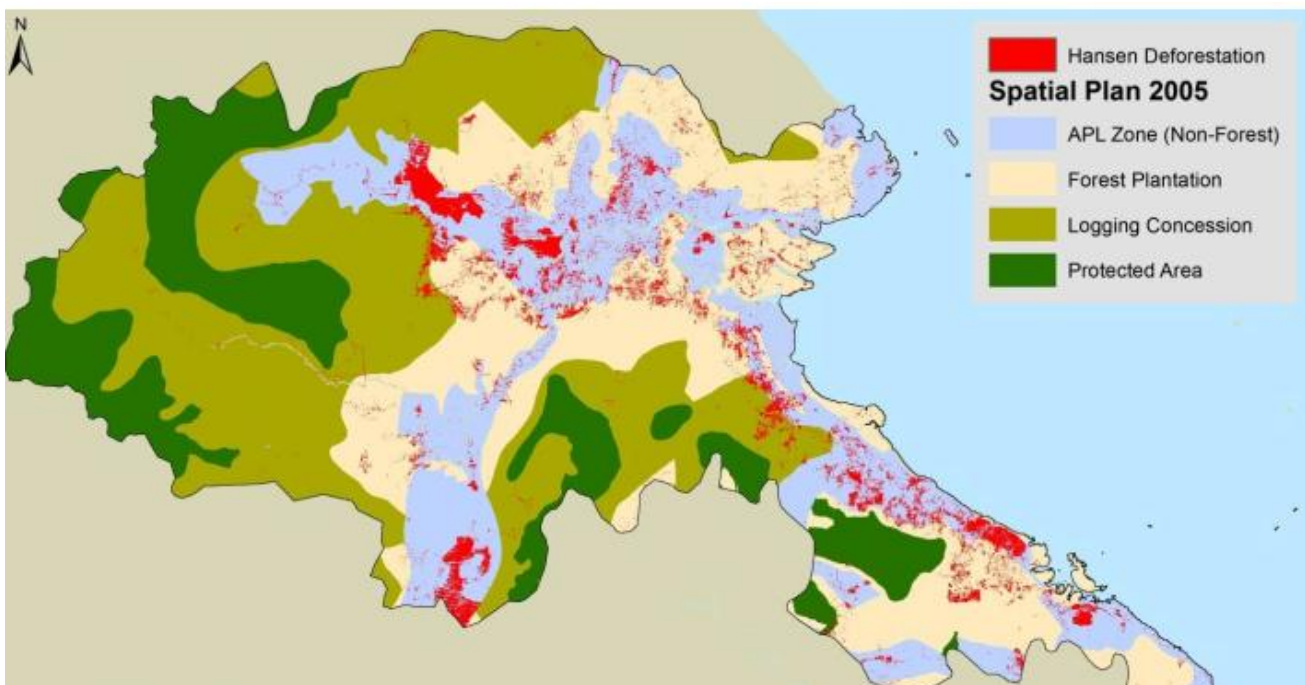Implementing partners (Local NGOs, TNC, ForClime, RECOFTC, etc.)

Institutional arrangements: a variety of different institutions have emerged through different initiatives and will need to be aligned in preparation for a district-level performance agreement

- Decision-making institutions
  - District government institutions
  - BFCP Steering Committee
  - ForClime Steering Committee
  - TFCA Oversight Committee
- Financing institutions
  - Government budget mechanisms
  - TFCA Trust Fund/Administrator
- Implementing institutions
  - District government agencies with BFCP responsibilities
  - Various local NGOs
  - ForClime (GFA, GIZ)
  - TNC
  - TFCA grant recipients
  - Others
- Multi-stakeholder forums
  - Berau REDD+ Working Group
  - Community Forum

Diverse drivers of forest loss

Legend:
- Hansen Deforestation
- **Spatial Plan 2005**
- APL Zone (Non-Forest)
- Forest Plantation
- Logging Concession
- Protected Area

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 CO_2/yr, mean 2000-2010)	Gross Sequestration (Mt CO_2/yr, mean 2000-2010)	Net Emissions (Mt CO_2/yr, mean 2000-2010)	Total Net Emissions 2000-2010 (Mt CO_2)	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	

- Pattern of forest loss mostly aligned with legal conversion of forests and legal logging
- 51% of emissions from deforestation in area planned for conversion
- 28% of emissions from legal logging in natural forest concessions
- 17% of emissions from deforestation in timber plantation licenses

REDD+ Strategies for Demonstration Phase

Criteria for selection of REDD+ strategies

- **Importance to reducing emissions in Berau**: the strategies should tackle major sources of emissions, and have the potential to develop permanent emissions reductions with low leakage.

- **Development benefits**: developing improved livelihoods options, protecting environmental services, and investing in productive capacity for future growth were key considerations.

- **Cost per ton of emission reductions**: key components of cost include opportunity cost, implementation cost, and transaction cost.

- **Feasibility**: implementation approaches understood; political acceptability; capacity of likely partners

- **Learning**: opportunity to generate lessons for scale-up of REDD+ in Berau, Indonesia, and beyond

Primary site-level strategies selected for BFCP in demonstration phase:

- Community-based natural resource management

- Reduced Impact Logging—Carbon

- Improved Protection Forest management

- Low-emissions palm oil

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; RIL-Carbon
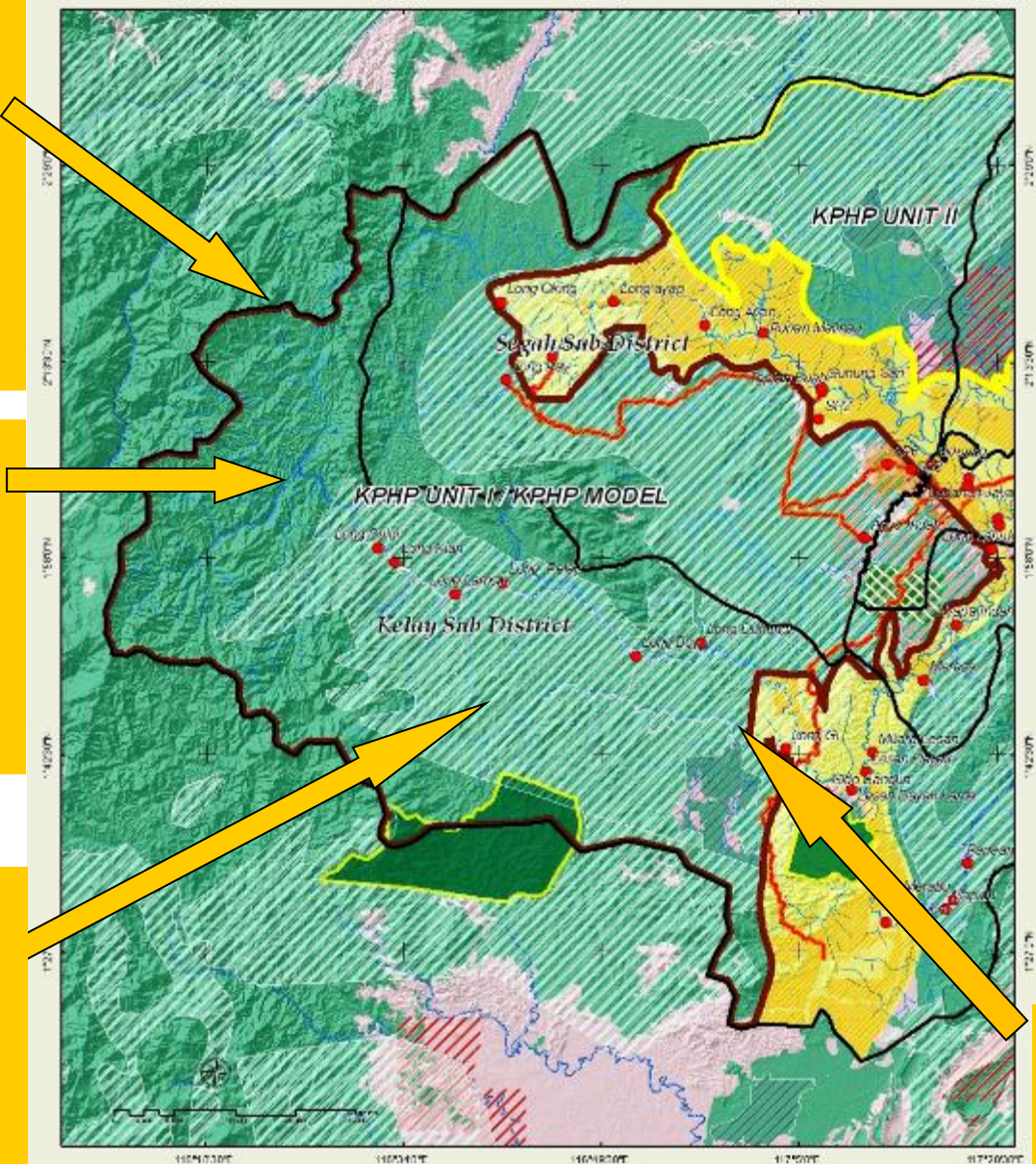
Linkage to National Programs: Berau program is supporting various national-level forest-sector reforms, many of which are linked together by a 775,000 hectare **Forest Management Unit pilot**

Communities: Village Forest licenses land tenure clarification

Overall approach: site level performance agreements within district program

4 **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 pubic financing from outside Indonesia
- Internal GOI payment/incentive transfer mechanism

National Carbon Management Program

1 **JURISDICTIONAL PROGRAM CREATES ENABLING CONDITIONS**

- District-wide carbon accounting
- Upfront finance
- Policy work
- Payment distribution mechanism

Program

MODEL INCENTIVE AGREEMENTS 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

2

3

Natural forest concessions

Villages

Palm Oil Concessions

Conservation or protection area

CUSTOMIZED AGREEMENTS

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

Potential non-carbon performance indicators for a district-level payment agreement

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 / Milestones	District	Site
# of KPH units established (or # hectates under effective KPH management?)	██	
% forest cover in newly allocated oil palm, mining, timber plantation concessions (goal = low forest cover)	██	
# hectares of forest concessions with SVLK/PHPL/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	██	██

Estimate of emission reduction potential in Berau

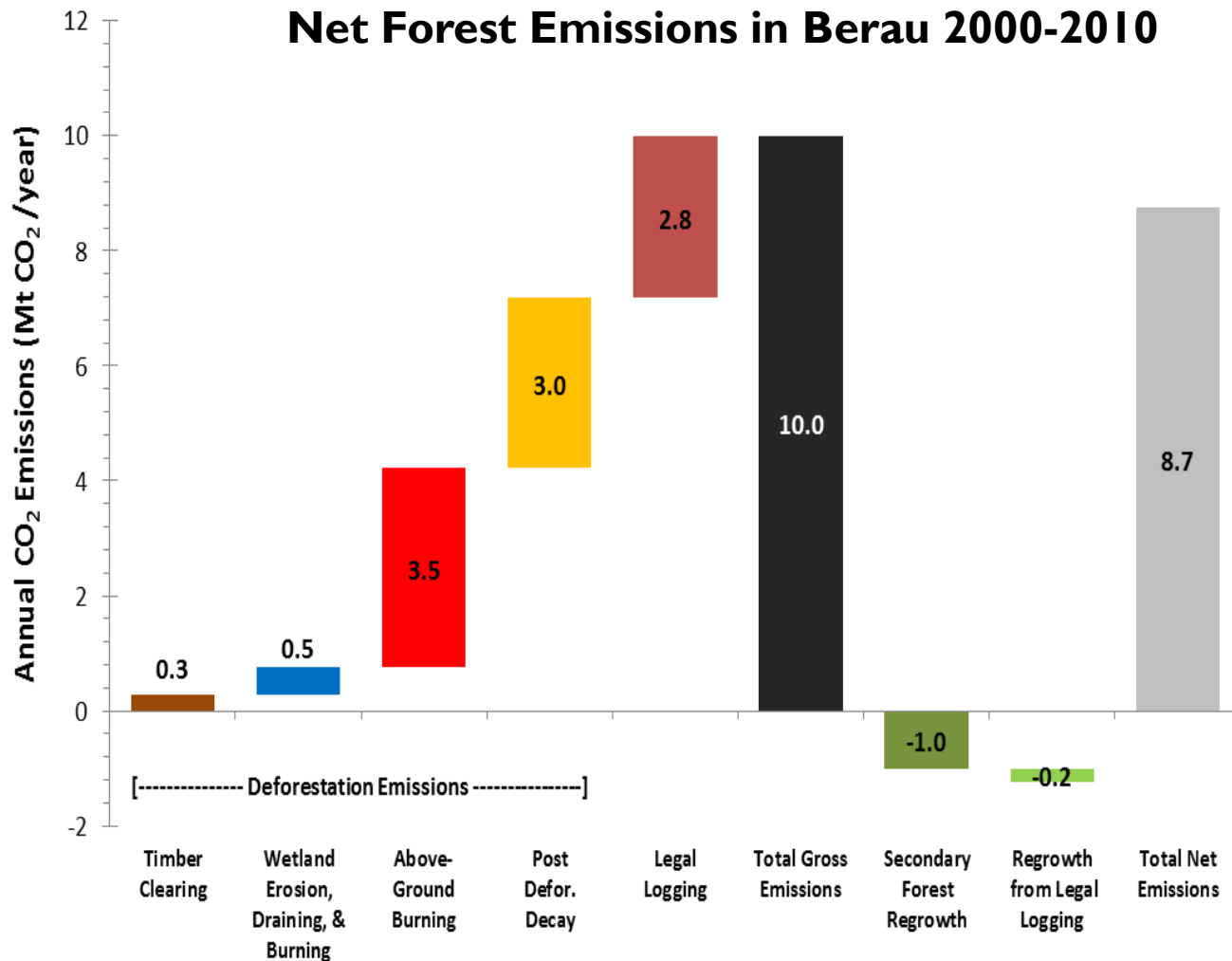| Area	Area deforested/ logged (ha/yr)	Area forest regrowth (ha/yr)	Net emissions (Tons CO_2/yr)	Strategy	Yearly Potential Emission Reduction
Natural forest concessions	12,079	4,742	2,940,000	Reduced Impact Logging; collaborative mgt w/ communities (build to 30% reduction over 5 years)	520,000
Areas 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**

BFCP STRATEGIES FOR COMMUNITY ENGAGEMENT

- Focus: 20+ villages in Kelay & Segah watersheds, including 2 coastal villages.

- Community and CSO consultations in the development of BFCP Community Strategy (led by the World Education).

- Community participation in BFCP decision-making processes (reps. in the BFCP Governance Structure or Advisory Board).

- BFCP will provide financial and technical resources to support community engagement.

- BFCP create and manage a fair and transparent payment distribution mechanism.

- TNC develops 'models' in certain sites.

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

Net Forest Emissions in Berau 2000-2010

Annual CO_2 Emissions (Mt CO_2/year)

	Value
Timber Clearing	0.3
Wetland Erosion, Draining, & Burning	0.5
Above-Ground Burning	3.5
Post Defor. Decay	3.0
Legal Logging	2.8
Total Gross Emissions	10.0
Secondary Forest Regrowth	-1.0
Regrowth from Legal Logging	-0.2
Total Net Emissions	8.7

[-------------- Deforestation Emissions --------------]

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,
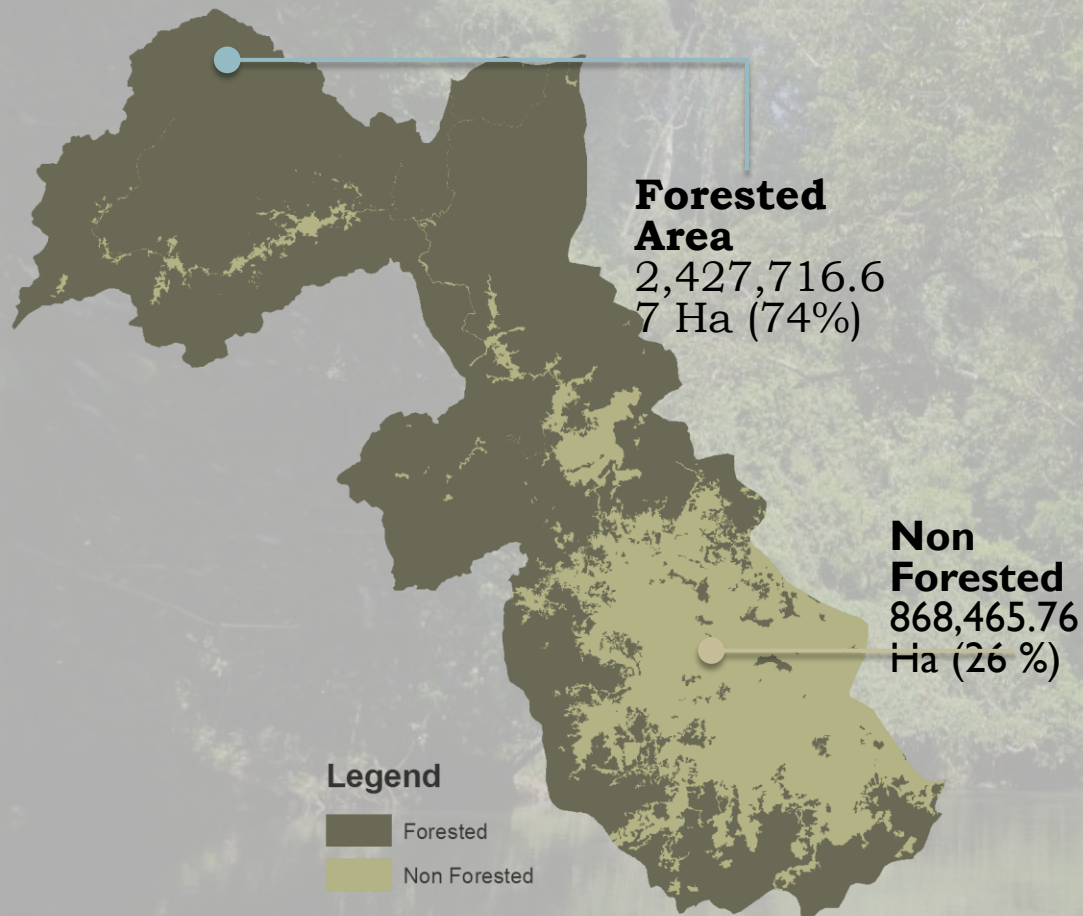- US Forest Service,
- Daemeter Consulting

Progress to date

‣ **Program governance**: Steering Committee established; REDD+ Working Group; Community Forum

‣ **Analytical base**: Completed in-depth analysis of production forests, profitablity of different land uses, HCVF 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**: Various sources of financing

‣ **Learning**: national-level BFCP lessons learned workshop series; substantial input to national REDD+ strategy and process; substantial inputs to East Kalimantan LCGS;
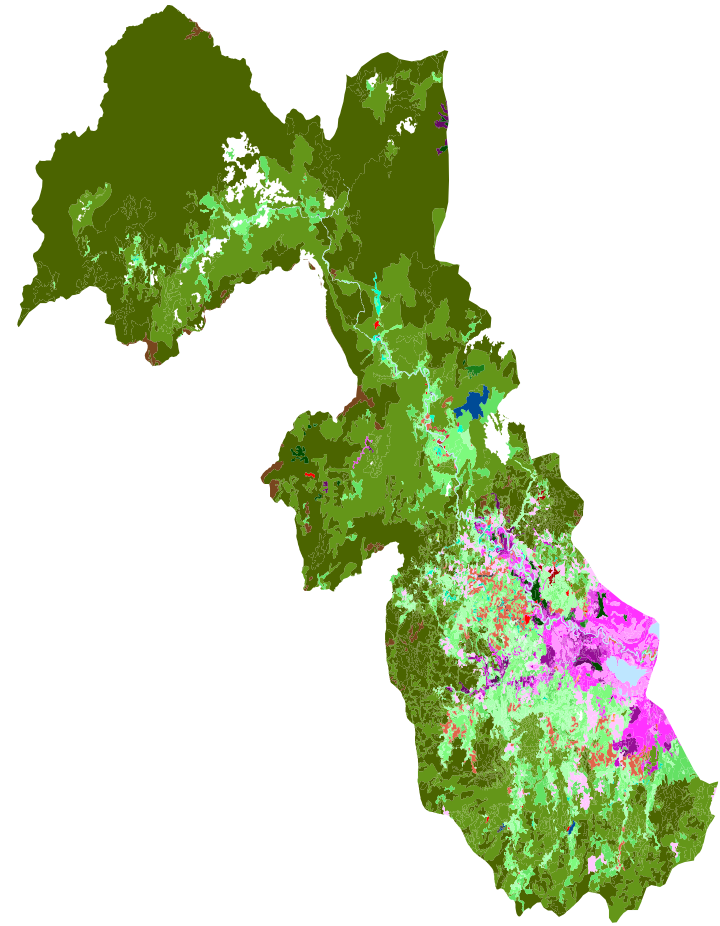
   ‣

2nd Sample of REDD+ District wide Approach : Kutai Barat

Forests in Kutai Barat District

Forested Area
2,427,716.67 Ha (74%)

Non Forested
868,465.76 Ha (26 %)
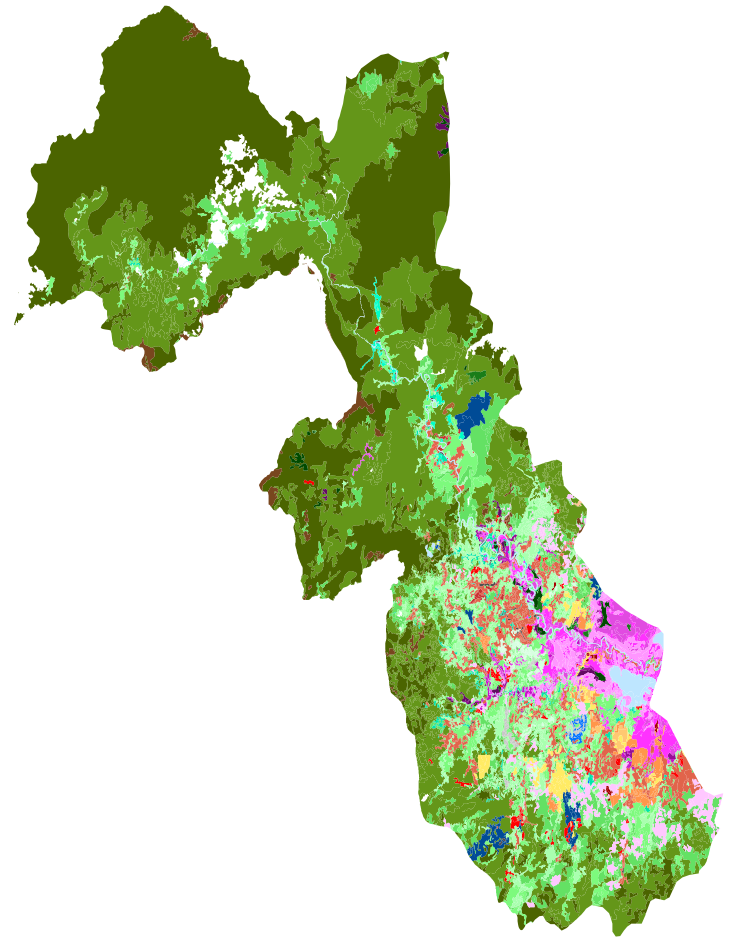
Legend
Forested
Non Forested

- Total area of Kutai Barat is approximately 3,2 million Ha (74% from the total district)

- Located in central of the Heart of Borneo (HoB), in the upper Mahakam river, largest river in East Kalimantan on which over 2 million habitants depend.

- Forests well manage by traditional ways, and currently at high threat

- Habitat for the key species such as freshwater dolphin; Sumatran rhino and orangutan.

- Large Indgenous population -Dayak

- High commitment from the district government
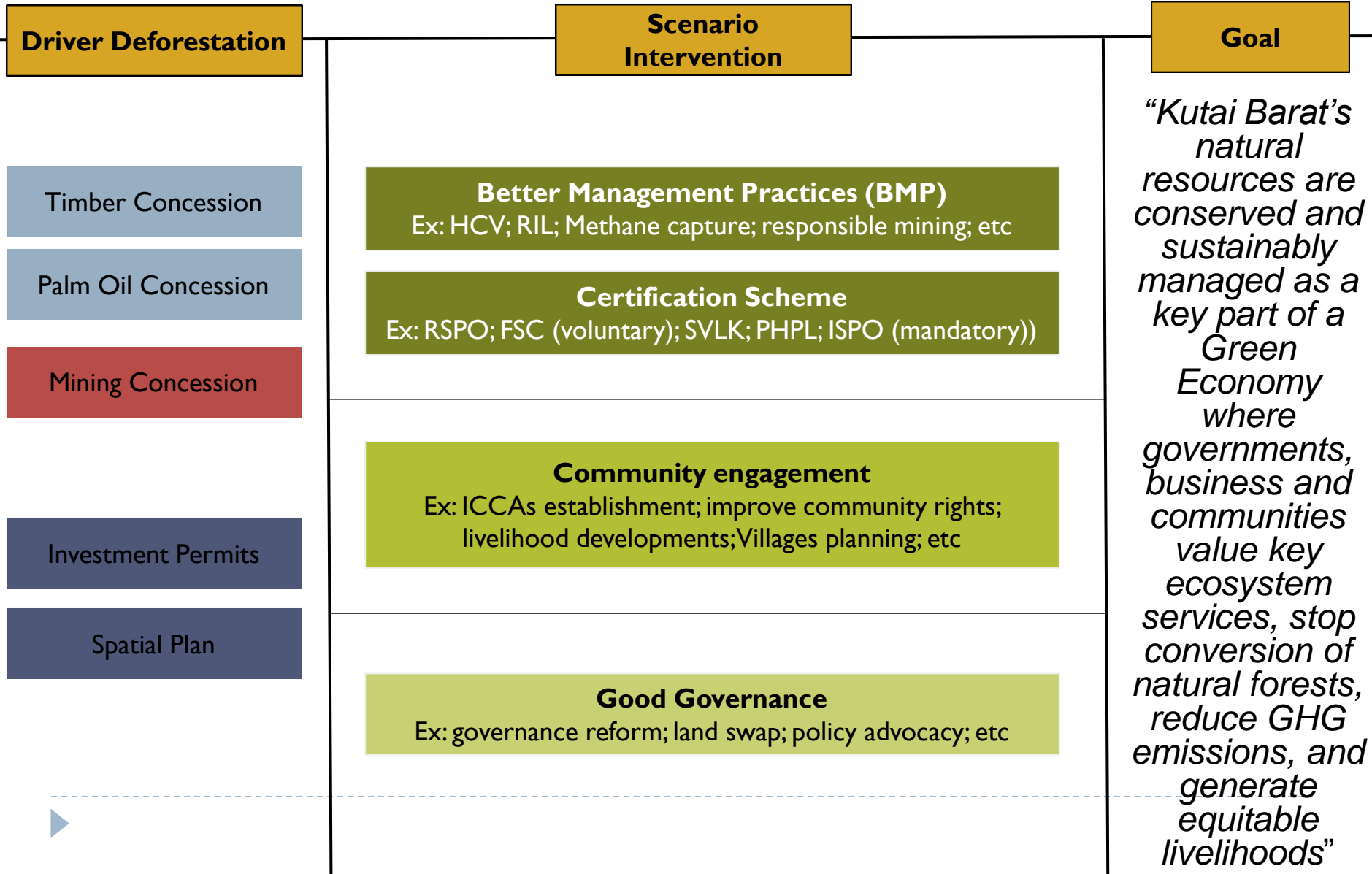
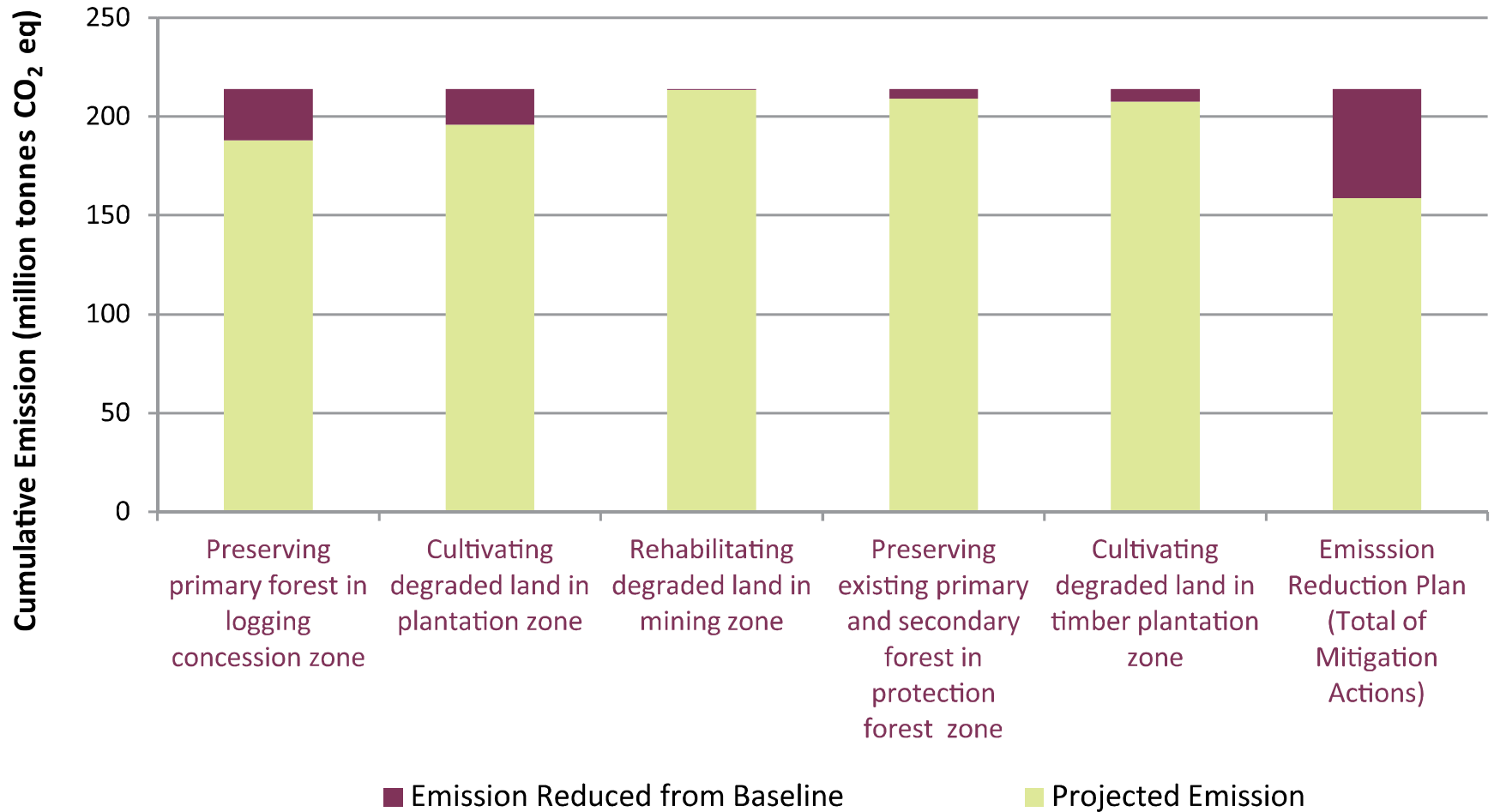# Land Cover Changes Year 1990, 2000 and 2009

1990

2009

Potential Emission Reduction Scenario

Driver Deforestation	Scenario Intervention	Goal

Driver Deforestation

- Timber Concession
- Palm Oil Concession
- Mining Concession
- Investment Permits
- Spatial Plan

Scenario Intervention

Better Management Practices (BMP)
Ex: HCV; RIL; Methane capture; responsible mining; etc

Certification Scheme
Ex: RSPO; FSC (voluntary); SVLK; PHPL; ISPO (mandatory))

Community engagement
Ex: ICCAs establishment; improve community rights; livelihood developments; Villages planning; etc

Good Governance
Ex: governance reform; land swap; policy advocacy; etc

Goal

"Kutai Barat's natural resources are conserved and sustainably managed as a key part of a Green Economy where governments, business and communities value key ecosystem services, stop conversion of natural forests, reduce GHG emissions, and generate equitable livelihoods"

Scenarios and their impacts on reducing cumulative emission 2000-2020
Draft figures

ICRAF, 2013

District Programs in other districts

- Other potential districts include Districts with substantial area under carbon-rich peatland.

  - Example: Kapuas in Central Kalimantan

- High carbon stock, very high emissions due to peatland fires

- Potential other Districts with district-level initiatives to be identified in the future

  - Data on the emissions at the District-level not available at this stage

  - However, various initiatives have generated substantial knowledge about this type of ecosystem

Why is the FCPF Carbon Fund of interest to Indonesia?

▸ FCPF Carbon Fund will add significant momentum of REDD+ in Indonesia

▸ Access to credible international partners and to technical assistance

▸ Contribute to Indonesia's goal of diversifying the sources of funding to emissions reductions – given Indonesia's ambitious commitments

▸ Ensuring the National Program is in line with emerging international methodological framework

▸ Increase legitimacy and ensure recognition of national efforts;

▸ Test a concept of rewarding result at decentralized level (District and Province), which could then be scaled up through FREDDI & national policies

Why Indonesia in the Carbon Fund?

- Large scale: Significant Emissions Reductions can be achieved through this Program
  - Step 1 : **Over 50 million ton CO2 !**
- Approach adopted is programmatic, scalable at the landscape level
- Program promotes to policy changes at the District level
- ER-P fully integrated into a well-developed national framework, and legislation
- Approach to reward 'good behavior' at the sub-national level (District)
- Diversity of learning
  - Dealing with some particular drivers, such as peat land emissions, forest land conversion into palm oil plantations
- Strong emphasis on partnerships with the private sector
- ER-P has the potential of leveraging substantial additional resources
  - Link to FREDDI (providing investment financing to Districts)
- Significant potential for co-benefits
  - Social (promotion of community forestry, support to indigenous communities, etc.)
  - Biodiversity (habitat for several key species)

Potential ERs from the ER-P
(Estimates for Step I = 3 Districts)

- Expected Emissions Reductions for Step 1:
  - 7.5 million ton CO_2 per year over the three Districts in Step 1
  - From 2014 to 2020: Over **50 million ton CO_2**

- These are rough and conservative estimates
  - Conservative on efficiency of the program
  - Conservative on carbon stocks
  - Conservative REL

- They do not yet account for high emissions from peatlands
  - Not clear whether FCPF methodological framework will allow for accounting of peatland emissions

THANK YOU

TERIMA KASIH