



Pendanaan REDD+ : Pengantar Pemahaman

By:

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PUSAT LITBANG Perubahan Iklim & Kebijakan,
BALITBANG HUT, Pelatihan Mekanisme
Pembayaran REDD+, Cisarua 21 Desember 2011



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APA YG HARUS DIPAHAMI
SECARA UTUH
UNTUK MEMBANGUN
MEKANISME PEMBAYARAN
REDD+ ?? (TERM??)



HUTAN DAN PERUBAHAN IKLIM

- “konteks hutan” dalam perubahan iklim dan konteks hutan selama ini
APA MASIH SEJALAN ???
- Apa REDD ??
- Apa REDD+ ??



Note: Bali Action Plan article 1. b. iii (REDD+):
Avoiding Deforestation, Conservation, Enhancing C
Stock, SMF

3 HUBUNGAN/PERAN HUTAN & PERUBAHAN IKLIM

FOREST AS A
SOURCE OF
EMISSION
(REDUCING
EMISSION FROM
DEFORESTATION &
DEGRADATION-
REDD)

- ◆ FOREST C **STOCK**
(Stabilization of
terrestrial carbon)
- ◆ ABILITY TO **ABSORB**
CO2 GHG &
Transform into
BIOMASS
(SEQUESTRATION-
OLD COMMITMENT – AR-CDM)

TUJUAN adanya MEKANISME FINANSIAL adalah:

OPTIMALISASI UPAYA DUNIA MENCAPAI
TARGET **PENURUNAN EMISI CO₂** melalui:

- Penurunan laju **penambahan CO₂ ~ REDD**
- **Penurunan konsentrasi CO₂ di udara ~
SFM dan Enhancement C Forest Stock**
- Mempertahankan keseimbangan C Stock
**~ Forest Carbon yg ada di hutan
konservasi dan lindung**





... Indonesia believe that key components of the work programme identified ,...necessary actions to accelerate and scale up REDD+ implementation **including the promotion of private financing and investment.**

AWG LCA DURBAN:

C. Policy approaches ...


62. *Recalls that for developing country Parties undertaking results-based actions⁴ referred to in decision /CP.16, paragraphs 73 and 77, to obtain and receive results-based finance*, these actions should be fully measured, reported and verified⁵, and developing country Parties should have the elements referred in decision 1/CP.16, paragraph 71, in accordance with any decisions taken by the Conference of the Parties on this matter;

63. *Invites Parties and accredited observers to submit to the secretariat, by 5 March 2012, their views on modalities and procedures for financing results-based actions* and considering activities related to decision 1/CP.16, paragraphs 68–70 and 72;



E. Various approaches, including opportunities for using **markets**, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries

*77. **Defines a new market-based mechanism**, operating under the guidance and authority of the Conference of the Parties, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries, which is guided by decision 1/CP.16, paragraph 80, and which, subject to conditions to be elaborated, may assist developed countries to meet part of their mitigation targets or commitments under the Convention;*



79. *Invites Parties and admitted UNFCCC observer organizations to submit to the secretariat, by 5 March 2012, their views on the matters referred to in paragraphs 77 and 78 above, including their experiences, positive and negative, with existing approaches and mechanisms as well as lessons learned;*



Kisi-kisi pendanaan utk REDD+ (Forest and climate change)

Forest and Climate Change	Source of Funding/investment (Dalam & Luar negeri)	Where the Value
<ul style="list-style-type: none"> • Source of Emission (-) • Value from Sequestration • Value from maintaining Forest C Stock 	<p><u>Non Market Based:</u></p> <ul style="list-style-type: none"> • G to G funding • Investment Fund <p><u>Market Based (buyers):</u></p> <ul style="list-style-type: none"> • Comply (offset) • Voluntary: Direct (Over the Counter), Future trading <p><u>Market Based (investment):</u></p> <ul style="list-style-type: none"> • pada perijinan yg ada • Ijin baru 	<p><u>All type of Forests:</u></p> <ul style="list-style-type: none"> • Hutan Konservasi • Hutan Lindung • Hutan Produksi • Hutan Konversi • Hutan Rakyat/private

Indonesia's Forests for Today and Tomorrow:

Pertimbangan Possible Value

Conservation
Forests
25.3 m ha.

Protected
Forests
30,9 m ha

Production
Forests
80.4 m ha

**Community
Forests**



Ecosystem/
Environment

Services/
Commodity

Renewable Energy
(Wood pellet,
Methanol-4thGenRenw En)

FOREST & C CHANGE:

Mengkaji Peluang utk Value

Major role of forest on climate change:

1. EMISSION (the world focus so far)
2. SEQUESTRATIONS (old commitment but important)
3. STOCK of SOLID CARBON (IGNORING FACTS/World data)

- ◆ Kalau menempatkan hutan hanya pada sisi emisi saja berarti HURTING THE VALUE OF NATURE SYSTEM (“tidak sesuai dg akal sehat”)

Challenge:

SHOULD BE THE CHANGING
OF GLOBAL DEMANDS AND
EXPECTATION FROM FORESTS
("REPACKAGING **SFM**" AND
IMPROVING)
FINANCIAL SCHEME SHOULD GIVE
BENEFITS TO THE
COMMUNITIES/FIELD PLAYERS,
COUNTRY AND THE WORLD
GREEN ECONOMY

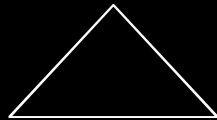
MANAGEMENT HUTAN = MANAGEMENT KARBON HUTAN

HK

HL

HP

HR



DELTA KARBON


- Pencatatan karbon (inventarisasi, RL/REL, ...)
- Pelaporan (MRV)
- KOMODITI TIDAK HANYA KAYU & HASIL HUTAN LAINNYA
- KOMODITI BARU KARBON HUTAN; ENERGI BIOMASA TERBARUKAN
- PETA, REMOTE SENSING/CITRA SATELIT, GROUND CHECK, INOVASI, TEKNOLOGI BENIH/AKAR,
- Analisa ekonomi kehutanan

PENTING

KONVERSI
BIOMASA POHON → CO2 eq:
BIOMASA POHON kering
MENJADI KARBON = 0.5
KARBON MENJADI CO2 EQ= X 3.7
Biomass to CO2 = X 1.83

Green Economy

(UNEP 2011, Towards a Green Economy)

- ◆ “Results in improved human well-being and social equity, while significantly reducing environmental risk and ecological scarcities”
 - ◆ “REDD+ regime may be the best current opportunity to facilitate the transition to a green economy **for (from) forestry**”
- 

Understanding Global picture:

Continue..

UNEP 2011, Towards a Green Economy

- ◆ investing 0.03% of GDP b/w 2011-2050 to conserve forests & private investment for reforestation →
>20% increase value added in forest industry compare to BAU



EMISSION vs OR & SEQUESTRATIONS



FORESTS & GLOBAL WARMING (STILL SOME CONFUSING?)

80 %
CO₂

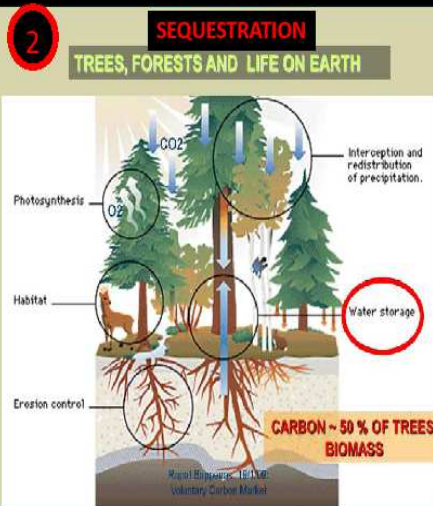


20 %
CO₂



TREES ARE THE SOLUTIONS:

- ABSORBING CO₂
- ~ 50% trees' biomass is a solid C/green products



HURT THE VALUE OF NATURE SYSTEM ("akal sehat")



STATISTIC OF EMISSION & SEQUESTRATION

CO₂ Global Emissions and Global Carbon Forests



Forests' role in global carbon

Reservoirs

Sinks

Sources
(deforestation)



1650 GtC
more than twice
the carbon as in the
atmosphere

2.8 GtC/yr

1.6 GtC/yr =
17.4% GHG
emissions

INDONESIA :

2020: 26% up to 41 %

26% : 14% forestry
12% non forest

ratio Indonesia (54 : 46), world 20 : 80

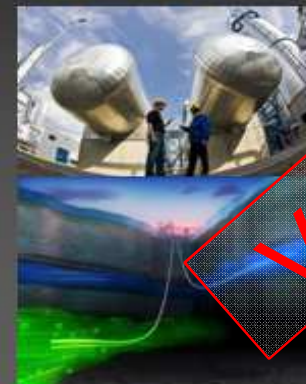
notes

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Challenge:

MITIGATION ACTIONS: JOINTLY SOLVE CO₂ BY REDUCING emissions and CAPTURING CO₂

Expl of Carbon capture and storage (CCS)



"CCS" INDONESIA "VOICE of FORESTS"



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Challenge:

Alternative (Financing option):

80 %
Emission

20 %
Emission

CDM

REDD plus
after 2012

INDONESIA

+ CONSERVATION,
SFM, ENRICH C STOCK

Market

Funding !!

Investment Fund !!

Investment !!

Gov Spending

Gov Spending

Market for private investment

Challenge:

FINANCING MECHANISM should be for ALL TYPE OF
FORESTS
(an OPTION)

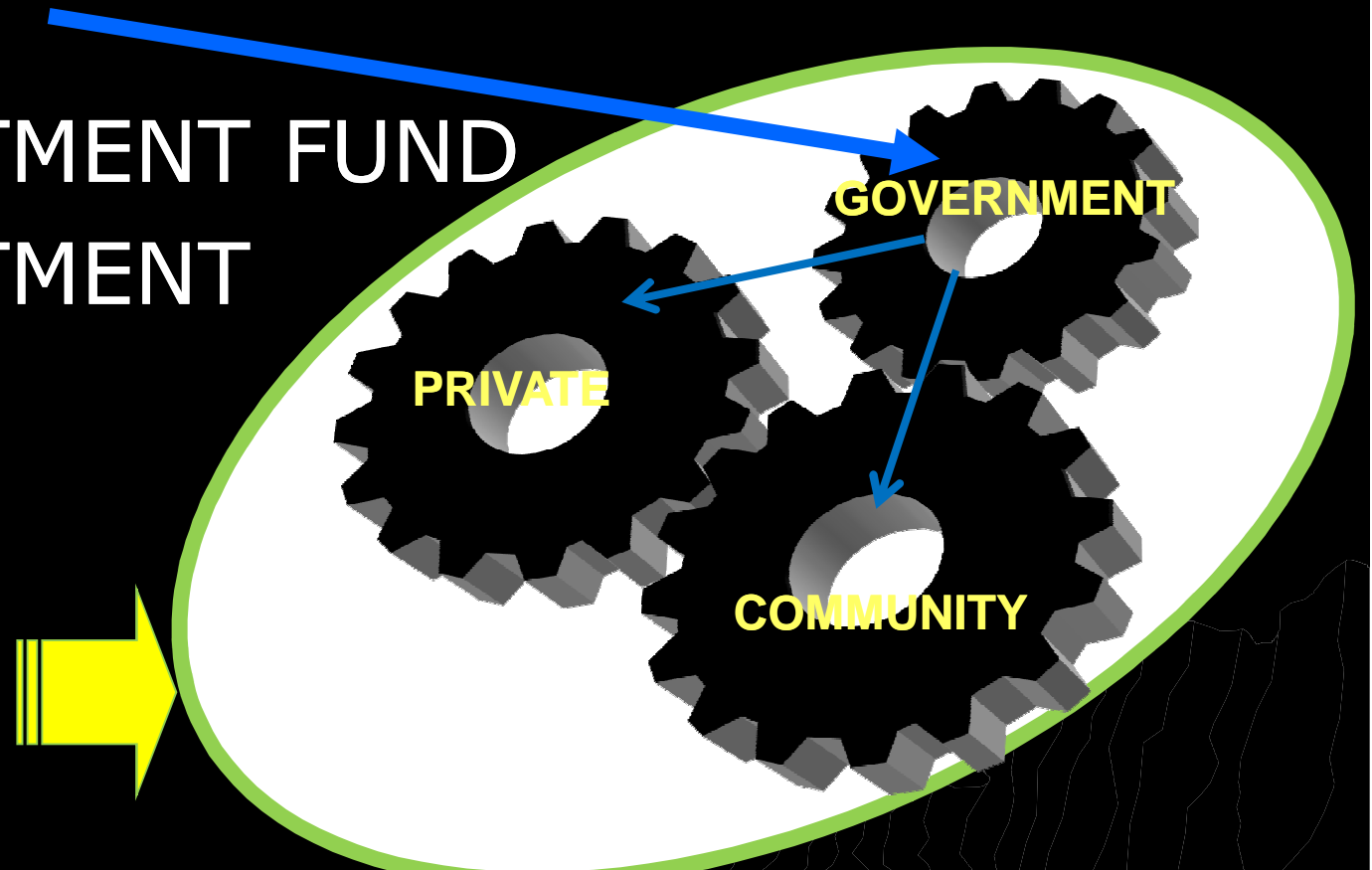
1. Funding !!

PROJECT

2. INVESTMENT FUND

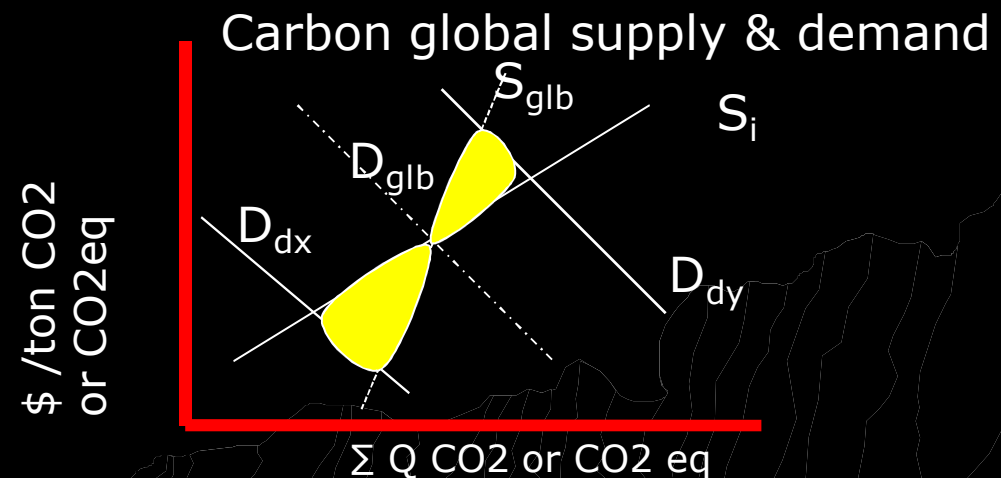
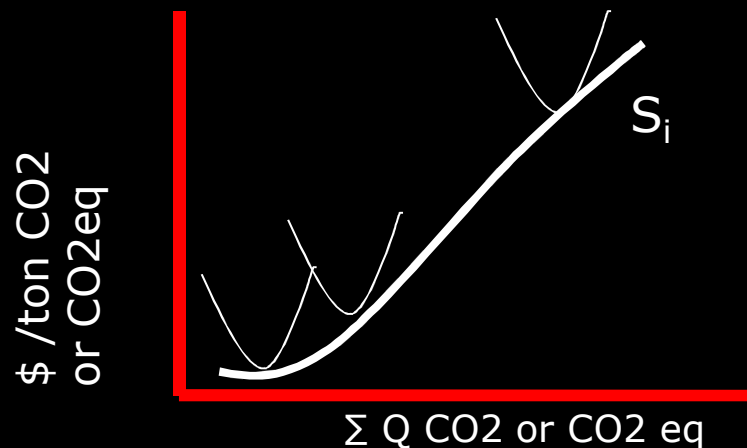
3. INVESTMENT

MARKET
(Voluntary & Compliance)



UNDERSTANDING ECONOMIC OF CLIMATE CHANGE: **FOREST RELATED**

- ◆ SCHEME AND VALUE OF CARBON FORESTS (Sequestration, Stocks, -Emission)
- ◆ TRANSFER PRICE MECHANISM (market based), Carbon Offset...
- ◆ Eliasch Review 2008: have to include forests carbon in the market for ambitious overall emission target
- ◆ WHAT IS ABATEMENT COST, COST CURVE, long-term, global /regional supply-demand



Challenge:

FOREST CARBON, CLIMATE CHANGE (QUADRAN OF **COMPANIONSHIP**/STARTER KIT)

+ 20% CO₂
FROM DEFOR/
LULUCF

± 80% CO₂ EMISSION FROM FOSIL FUEL

REDD

Reducing emissions :
Clean Technology
Clean energy
Markets (compliance,
voluntary)

Trees as a
remedy/cure for CO₂
in the atmosphere
(ABSORBING CO₂
COOLING DOWN
THE EARTH)

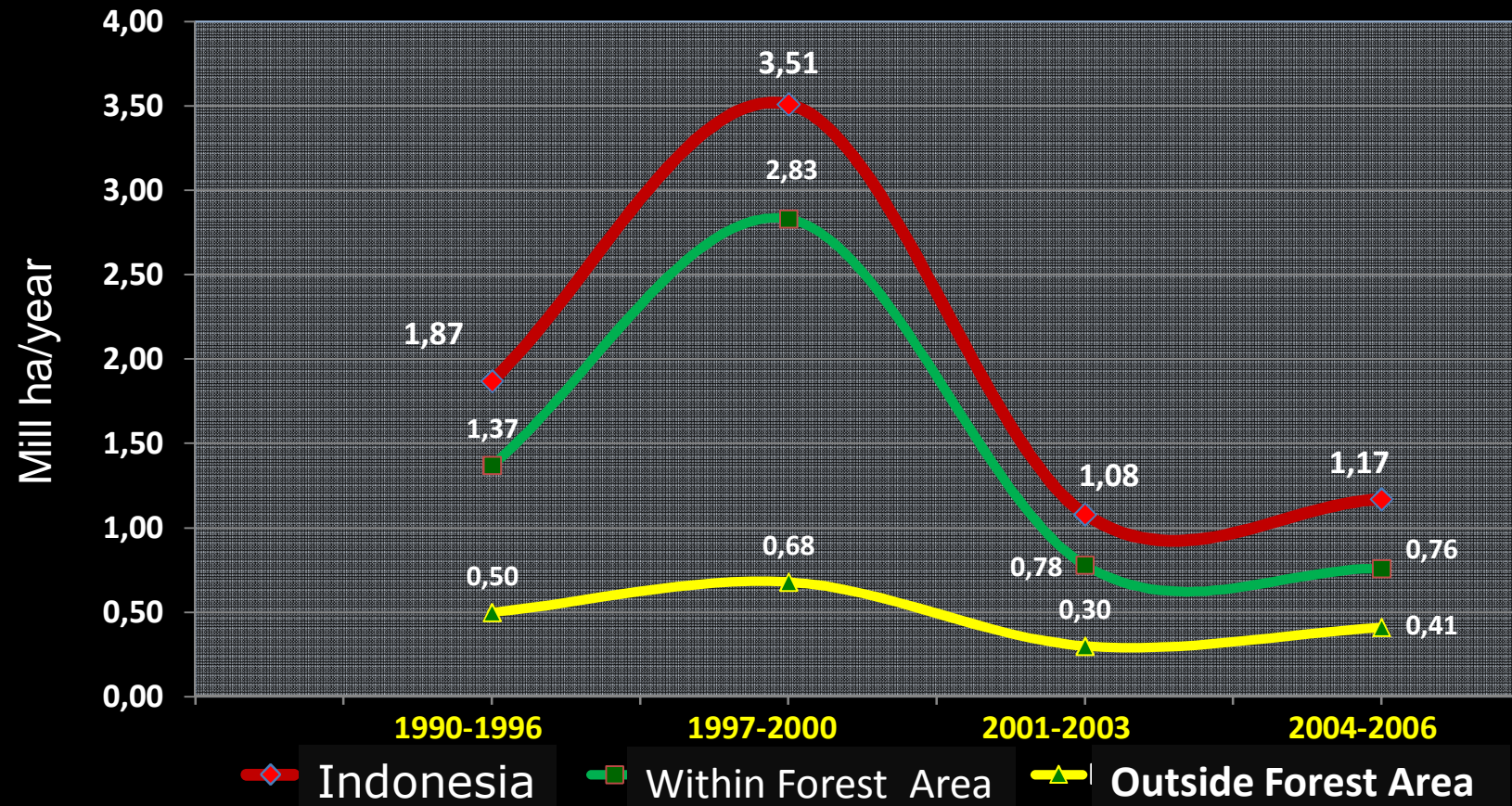
R E D D P L U S --- new AR CDM ?

F o r e s t + c a r b o n

LOCAL, NATIONAL, GLOBAL

facts:

REPORT ON REAL ACTIONS RATE OF DEFORESTATION



Annual Rate of Deforestasi	1990-1996	1997-2000	2001-2003	2004-2006
Indonesia	1.87	3.51	1.08	1.17
Within Forest Area	1.37	2.83	0.78	0.76
Outside Forest Area	0.50	0.68	0.30	0.41

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MEKANISME PEMBAYARAN REDD+ ???

INDONESIA SHOULD WELCOME ALL POSSIBILITIES ..under consideration of:

1. Possible and workable
2. Optimal for the development,
3. Acceptable by partners/world

Indonesia has modalities for all activities for all type of forests:

The activities range from conventional forestry program (SFM, Conservation, community etc), AR CDM, REDD, REDD+ (REDD, Conservation, enhancing c stock, SFM), Up to new programs within forest and climate change (**Wood Pellet**, Wood Methanol)

Challenge:

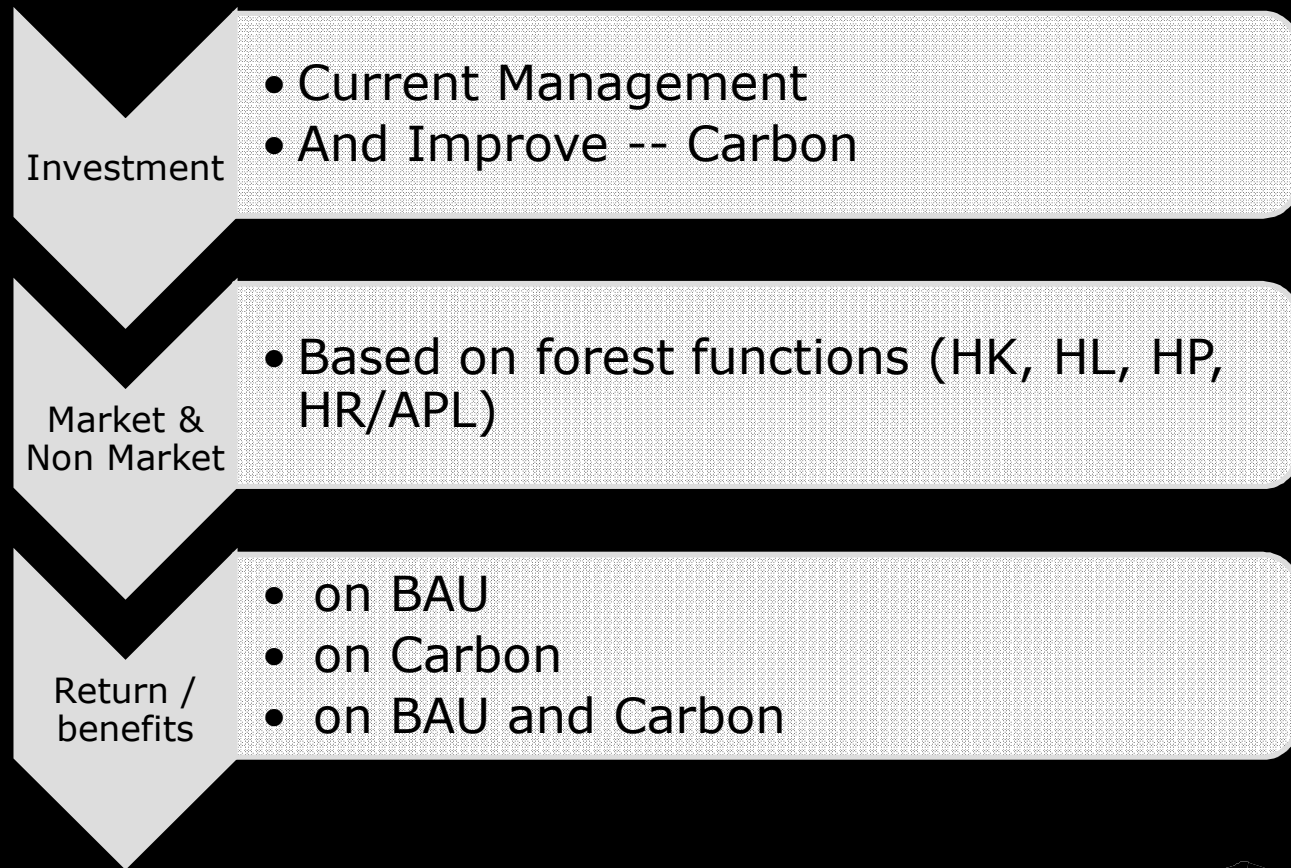
DISKUSI DAN PELATIHAN MEKANISME
PEMBAYARAN REDD+

AGAR

MEMPERTIMBANGKAN BUTIR-
BUTIR DIATAS

KLARIFIKASI KERANGKA PIKIR (??)

MEKANISME PEMBAYARAN REDD+ ???





Thank you
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