

Decarbonization on small scale:  
Lesson learnt with community on  
*MULTI STAKEHOLDER PROCESSES*: A long  
way to Self Implementation of REDD+ at Air  
Lanang Social forest, Rejang Lebong,  
BENGKULU

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*Alif Mublis*

# LANDSCAPE BUKIT DAUN REGISTER 5 (2.068 HA)

## ULU MUSI Water catchment Area

**UJAN MAS Social Forest (319 HA)**

**HKM TANJUNG ALAM SF (450 HA)**

**HKM AIR LANANG SF (348 HA)**

**UJAN MAS hidro power**

All financed and supported by JICA at early 2000



**Programs At Air Lanang Social Forestry  
(formerly Protection Forest)  
Initiated early 2000 by Indonesian Gov with support  
JICA**

REHABILITATE PURE COFFEE PLANTATION AT FORMERLY PROTECTION FOREST INTO MORE ENVIRONMENTAL SOUND FOREST MANAGERMENTS THROUGH INTRODUCING AGROFORESTRY SYSTEM AND CALLED IT AS SOCIAL FORESTRY PROGRAM

HOWEVER, IT DID NOT WORK WELL AS INDICATED BY LOW NUMBER OF MULTIPURPOSE TREES PER HA, WHICH WERE FAR LESS (314 TREES/HA FROM IDEAL CONDITION 411 TREES/HA

## Sistim Agroforestry at Air Lanang Social Forestry



Coffee + Multi purpose trees (mpts)  
(Durian, Bettle nut trees, )

- a. Ideal condition : 411 MPTS trees/ha (ENCUM 2010)
- b. Reality: farmers planted far less than ideal (average 314 trees)



MPTS/HA	Number of growers (%)
a. < 200 trees	18.41 %
b. 200-400 trees	51.97 %
c. > 400 trees	29.61 %
Average =413 trees	

## **IMPLEMENTATION OF REDD+ AT SMALL SCALE with OBJECTIVES**

- A. Restoring ecosystem functions of Coffee Plantation formerly Protection Forest**
- B. Restoring hydrological functions**
- C. Increasing villagers' welfare**
- D. Implementing REDD+ with self financed at mikro scale**
- E. Saving and protecting livelihood at watershed area**

# **METHODS**

1. STAKE HOLDER ANALYSIS
2. SCENARIO ANALYSIS



STAKE HOLDERS

Agriculture, plantation,  
And forestry gov offices



KETAHUN Watershed  
Management office (KWMO)



NGO



Bukit Daun Watershed



Coffee growers

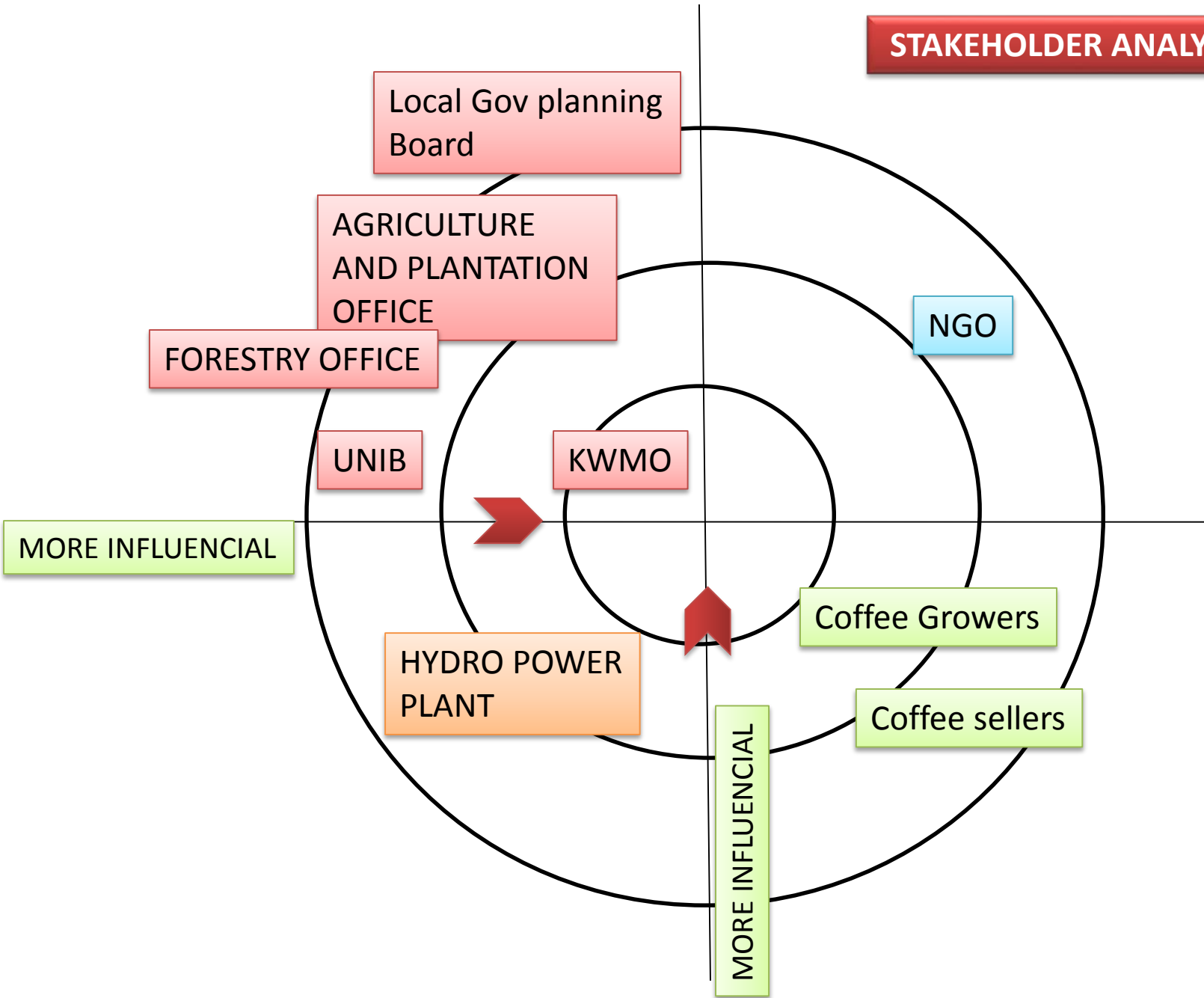


University of Bengkulu



Hydro electric power plant

# STAKEHOLDER ANALYSIS





# Scenario Analysis

HIGH

- a. Poor community with low food security
- b. High conflicts between community and gov on land tenureship
- c. Social unrest
- d. Bad hydrology functions
- e. Degraded environment

- a. Community careless to the REDD+ Program Due to more stable house hold economics
- b. No synchronization between gov programs on Social forestry and the needs of community

LOW

LIVEHOOD

HIGH

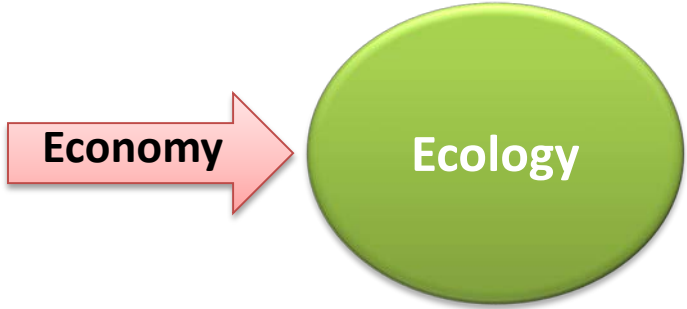
- a. High community participation to the program
- b. Insignificant effects on community welfare from the programs
- c. Low government supports

Top down Policy

- a. High participation community with supports From government
- b. Choices for MPTS based on economic, ecology,
- c. Alternative household incomes, besides coffee
- e. High acceptibility of Agroforestry system

LOW

# Progress on Capacity building on Farmer group



Select MPTS Nutmeg trees  
Training on Nutmeg nursery (2009)



Provide seedlings (6000 sdling) (2013)

Farmer group

Farmer Group

Nursery

Nursery

Self providing seedlings,  
Income generatings

**ROAD MAP  
REDD+ ON SMALL  
SCALE  
SELF FINANCED**

Technical training on  
AGROFORESTRI (2016-  
2018)

Technical training  
On product  
diversification on  
cooffee (2016-2017)

Capacity building  
on  
Farmer coop or  
group (2016-2019)

TRAINING  
ON NUTMEG  
NURSERY  
(2009)

Traning on  
nursey  
management  
(2014)

Technical  
training on  
products of  
Nutmeg (2015)

Marketing  
(2018-2019)

**TUJUANN  
JANGKA PANJANG**

**FIELD  
SCHOOL  
ON Social  
forestry  
AIR  
LANANG**



**RESTORING  
Carbon  
Hydrological  
function  
INCREASING  
COMMUNITY  
WELFARE**

System Information  
trees  
(2015)

Infrastructure development  
2016-2017

Tree mapping with  
GPS (2016-2017)

marketingEnvironmental  
services  
(water and caarbon)  
(2018-2020)

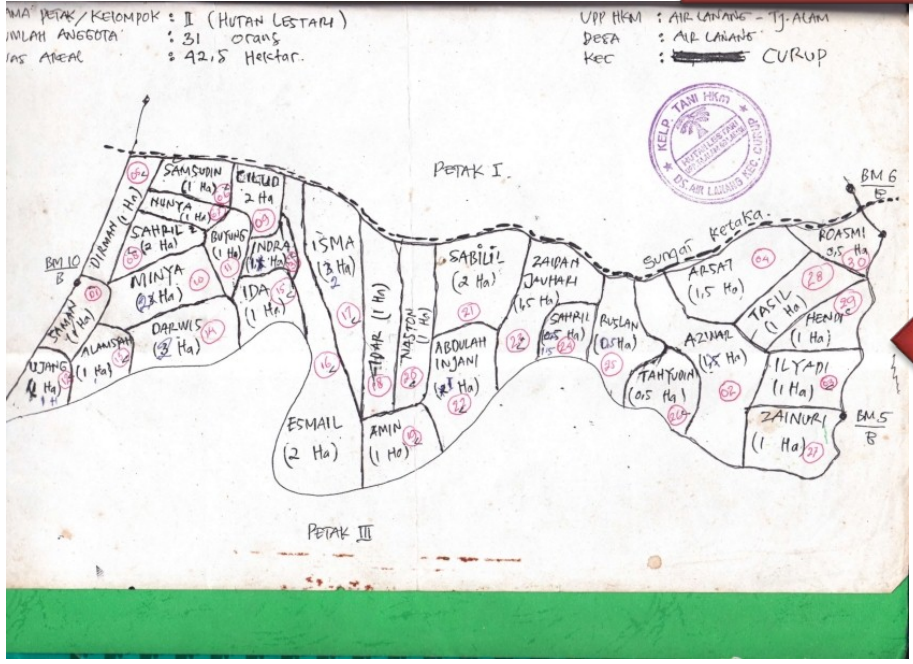
**COLOR CODE**

**CAPACITY BUILDING**  
Human resource/ farmer  
groups

**DATA BASE** development for REDD+  
purposes; Measureble, accuntability,  
transparency

**PENGEMBANGAN  
SARANA**

# Tree System Information (BIOMASS/CARBON)



Tree mapping with GPS

Tree carts

MEASURABLE, ACCOUNTABLE, TRANSPARENT FOR REDD+ AND ENVIRONMENTAL SERVICES (CARBON AND WATER) PURPOSES

KARTU PENGEMBARAN POHON HKM

Tahun Pengukuran 2013

Nama Anggota : \_\_\_\_\_  
 Lusa Laha HKM : \_\_\_\_\_  
 Desa : Air Lamang, Kec. Curup Selatan

Kelompok Tani HKM : Sumber Rejeki

No.	Nama Jenis	Tingkat Pertumbuhan dan Jumlahnya			Keterangan
		Stem	Panjang	Tinggi	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Air Lamang, Januari 2013  
 Petaka HKM  
 Monev  
 Ketua Kelompok Tani HKM  
 Kepala Desa Air Lamang  
 Sumber Rejeki  
 (M. Nur Kasmir)  
 (Dawid Satriadi)

Tahun Pengukuran 2014

No.	Nama Jenis	Tingkat Pertumbuhan dan Jumlahnya			Keterangan
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