Participatory Prospective Analysis (PPA):

Scenario building approach for improving, exploring and anticipating challenges in complex multi-stakeholders systems

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Center for International Forestry Research

Outline

- ❑ Overview of PPA method

- ❑ Case study

- ❑ Lessons learnt

- ❑ Challenges

- ❑ Implications

Participatory Prospective Analysis

An applied foresighting approach developed by CIRAD

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Principles of PPA

- Sources:
  - The knowledge of actors and "experts"
  - Existing documents and data

- Forms of interaction:
  - Group work based on "Expert meeting"

- Methods:
  - Qualitative data
  - Quantitative analysis when possible

The 8 steps of PPA

1. Define the limits of the system

   S0 – Definition of the system

2. Identify the variables

3. Define the variables

   S1 – Identification of the key factors that will shape the future

4. Analyze their mutual influences

5. Identify and select the key variables

6. Define the states of the variables

   S2 – Identification and description of the possible futures

7. Build up scenarios

8. Implications of the scenarios and related actions

   S3 – Definition of a strategy

PPA APPLICATION
Case study in Indonesia (Kalimantan & Maluku)

31.000 km2
208.000 inhabitants

7.700 km2
175.000 inhabitants

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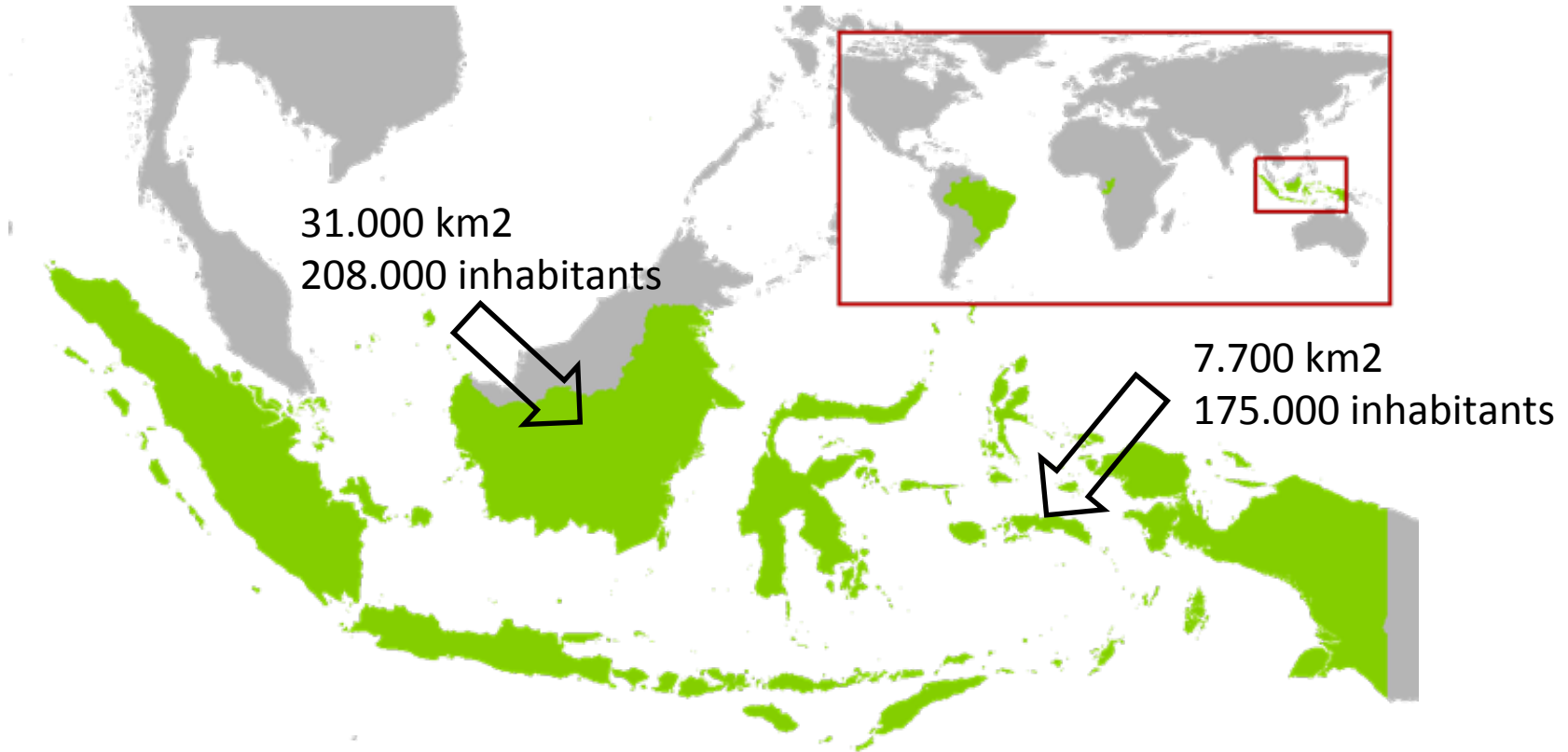
Forestry and Land use planning issues in Indonesia

❑ Overlapping authorities (central vs district), ambiguous regulations

❑ Lack of coordination within sectors in spatial planning; development vs conservation

❑ Driven by large scale business and political agenda

❑ Lack of community participation that caused of tenurial conflict (Status of State owned land vs Customary land; local people vs investor/concession holder;

❑ Lack consideration of Ecosystem Services in the process (Ecosystem based LUP, Ecosystem Based Adaptation)

Objective

- What approach can allow multiple needs of land taken into account in land use decision making?

Organizing PPA

- Develop facilitator team
- Identification of stakeholders and Steering Committee
- 15-22 stakeholders: district government, parliament, NP, local community, customary leaders, private sector, NGOs, and universities
- Three series of "expert" group meeting

Define System Boundary (1)

❖ Q: What could be the future of **land use?**

❖ Time: **20 years**

❖ Geographic boundary:

  ✓ Kapuas Hulu regency

  ✓ Central Maluku regency

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Identification of Variables (2,3)

- Economic, social, politic, environment

- For example:
  - Customary law
  - Education
  - Income
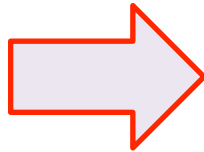
No	Nick name	Variable	Definition
1	KOORD	COORDINATION AMONG SECTORS	The pattern of work among sectors (Dinas), in accordance with the duties and functions
2	POLAPIKIR	MINDSET / PARADIGM	Perspective in viewing and analyzing the problem
3	HKADAT	ADAT LAW	Recognition and law enforcen within adat community and outsiders who go inside the a territory
4	MURID	NUMBER OF STUDENTS	Number of children at school who attend the school
5	PENDPATAN	INCOME	Community income earned w a period of time
6	KESHATAN	LEVEL OF COMMUNITY HEALTH	Level of community health
7	AKSEHAT	COMMUNITY HEALTH ACCESS	Availability of facilities and he workers in serving the needs public health
8	PENDIDIKAN	EDUCATION LEVEL	Average level of education attained by the community
9	KOMAPEM	COMPETENCY OF GOVERNMENT OFFICIALS	Ability of the officers in the implementation of governme public service

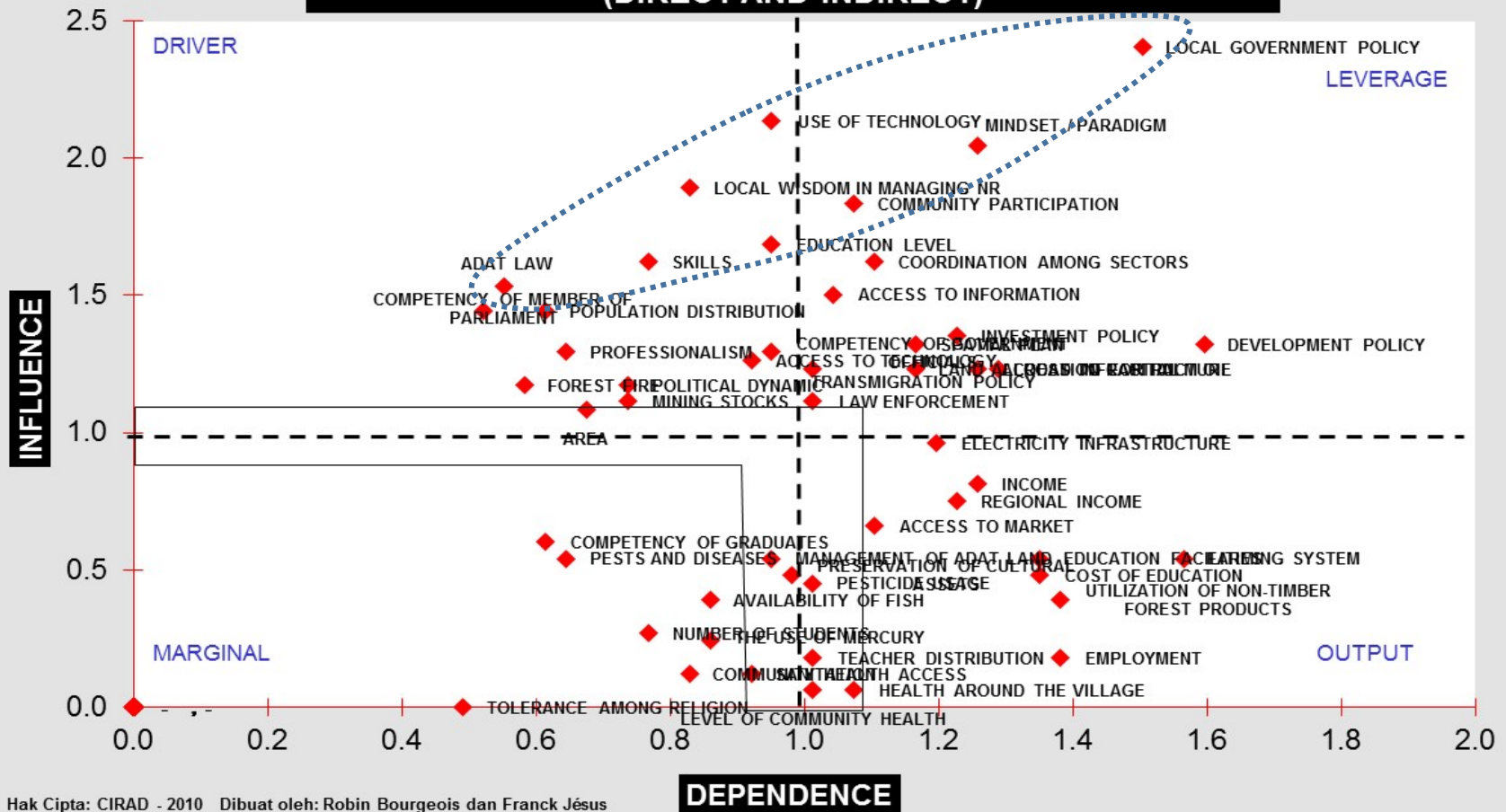# Influence/Dependence Analysis (4)

50 INTERNAL VARIABLES

Influence/Dependence Analysis

i ➝ j ➝ k
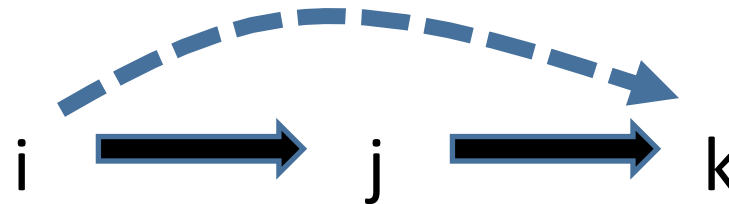
- Direct influence variable *i* to variable *j* ;
- Direct influence = 1; No influence = 0
- Indirect influence (*i* ➝*k*) :

Direct influence table:
Copied for multiplication

	Var. A	Var. B	Var. C
Var. A	$M_{A,A}$	$M_{A,B}$	$M_{A,C}$
Var. B	$M_{B,A}$	$M_{B,B}$	$M_{B,C}$
Var. C	$M_{C,A}$	$M_{C,B}$	$M_{C,C}$

Direct influence table:

	Var. A	Var. B	Var. C
Var. A	$M_{A,A}$	$M_{A,B}$	$M_{A,C}$
Var. B	$M_{B,A}$	$M_{B,B}$	$M_{B,C}$
Var. C	$M_{C,A}$	$M_{C,B}$	$M_{C,C}$

	Var. A	Var. B	Var. C
Var. A	$M_{A,A}$	$M_{A,B}$	$M_{A,C}$
Var. B	$M_{B,A}$	$M_{B,B}$	$M_{B,C}$
Var. C	$M_{C,A}$	$M_{C,B}$	$M_{C,C}$

$$RTI_{A,C} = M_{A,A}* M_{A,C}+ M_{A,B}* M_{B,C}+ M_{A,C}* M_{C,C}$$

Result: Indirect influence table
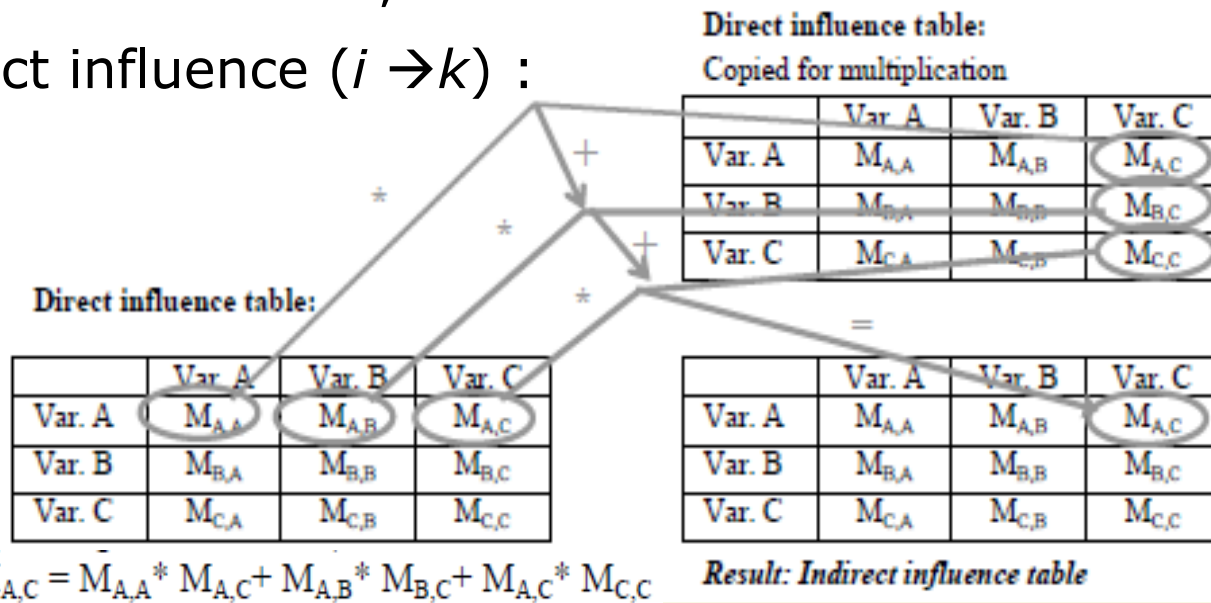
(5) Key drivers: Government policy, use of technology, customary law and wisdom, mindset, participation, education and skills

Building Scenarios (6,7)

❑ Community participation

❑ Legality of land

❑ Government policies

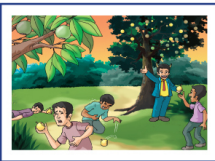❑ Spatial planning policies

❑ Community empowerment policies

No	Key variables	Similar variables	States			
			A	B	C	D
1	Community Participation		Community involved in planning, implementing, and monitoring of land use in a transparent system.	Top-Down approach in planning and land management (community, as the executor).	Community refused to participate in the process of land management.	Communities manage land regardless of the formal rules.
	...ality	Customary Land Tenure	Customary rights and local wisdom are arranged in local legislation, and are implemented.	State controls of customary land and ignores the values of local wisdom.	There is no certainty of customary land law and ... loss of loca... ...nd valu...	*Petuanan* customary rights of indigenous peoples ...ters witho... ...o gove... regulation...
		Local Wisdom				
		Petuanan Customary Rights				
	...olicies	Central Government Policies	Head of Regional Policy and the Central Government accommodate the interests and welfare of the com...	Head of Regional Policy and the Central Government is authoritarian, only in favor of certain groups, and did not consider the interests and welfare of the community.	Regent policies and regulation do not considered sustainable land use (social, economic, and physical).	Communities reject all policies, i.e., Regent's and the Central Government's policy in land use.
	...lanning	Forest Land Uses and Planning Policies	Spatial Policy in a rational and realistic manner, based on regional characteristics.	Utilization of space that does not refer to spatial planning policies.	Determination of forest area that is not proportional to the spatial planning policies.	Spatial planning policies are not in accordance with regional characteristics.
		Palm oil Investment Policies				
		Forest Land Uses				
		Land Conversion Policies				
		Land Suitability for Plantation and Agriculture				
5	Community Empowerment Policies		Community empowerment policy in accordance with the capacity of community and business characteristics based on...	Community empowerment policy which does not correspond to the capacity of the community, and...	Society refuses or does not utilize the empowerment of government policy	

Thinking beyond th...

CONFLICT   EXCLUSION OF PEOPLE   REJECTED PARTICIPATION   COLLABORATION

NOT DESIRED   **DESIRED**

Maluku Scenarios

The sun is shining on Seram Island

VS

Irresponsible policies

Kalimantan Scenarios

VS

System map of proposed plan
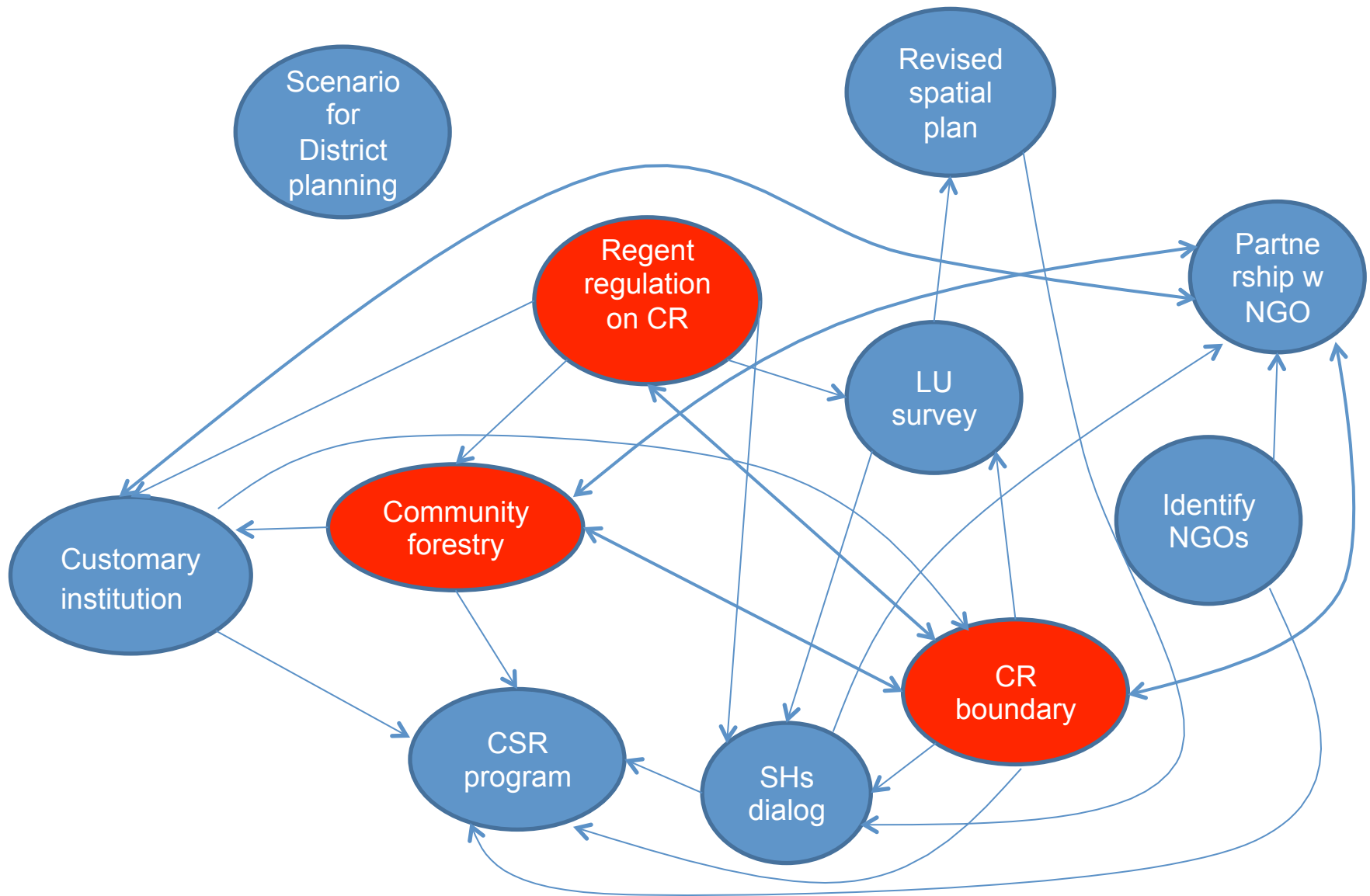
From scenarios to Action (8)

Proposed action:

❑ Integrated action plan for district mid-term planning

❑ Commitment of all stakeholders to implement the action plan

❑ LUP dialogue at national level involving key decision makers at MoF

Evidence:

▪ Decision maker agreed to legalize group PPA for future activities

▪ The district government prioritized programs relevant to key variables of scenario

▪ National stakeholders workshop stimulated policy discussion at national level

Ongoing Action

Recommendation to use 1:50.000 scale of land allocation map for district level
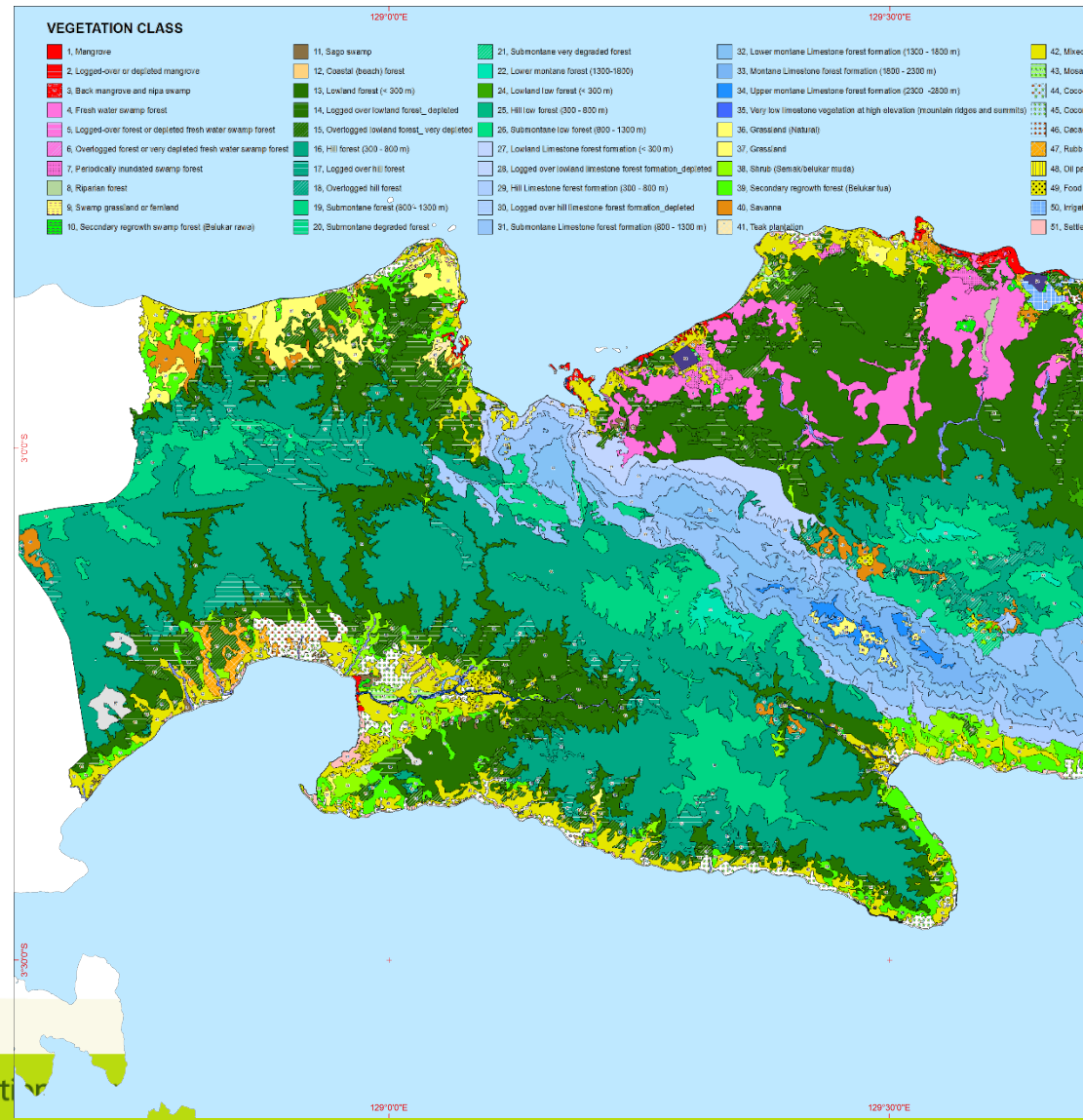
PARTICIPATORY PROSPECTIVE ANALYSIS (PPA) PROCESS FLOW

Lessons learnt

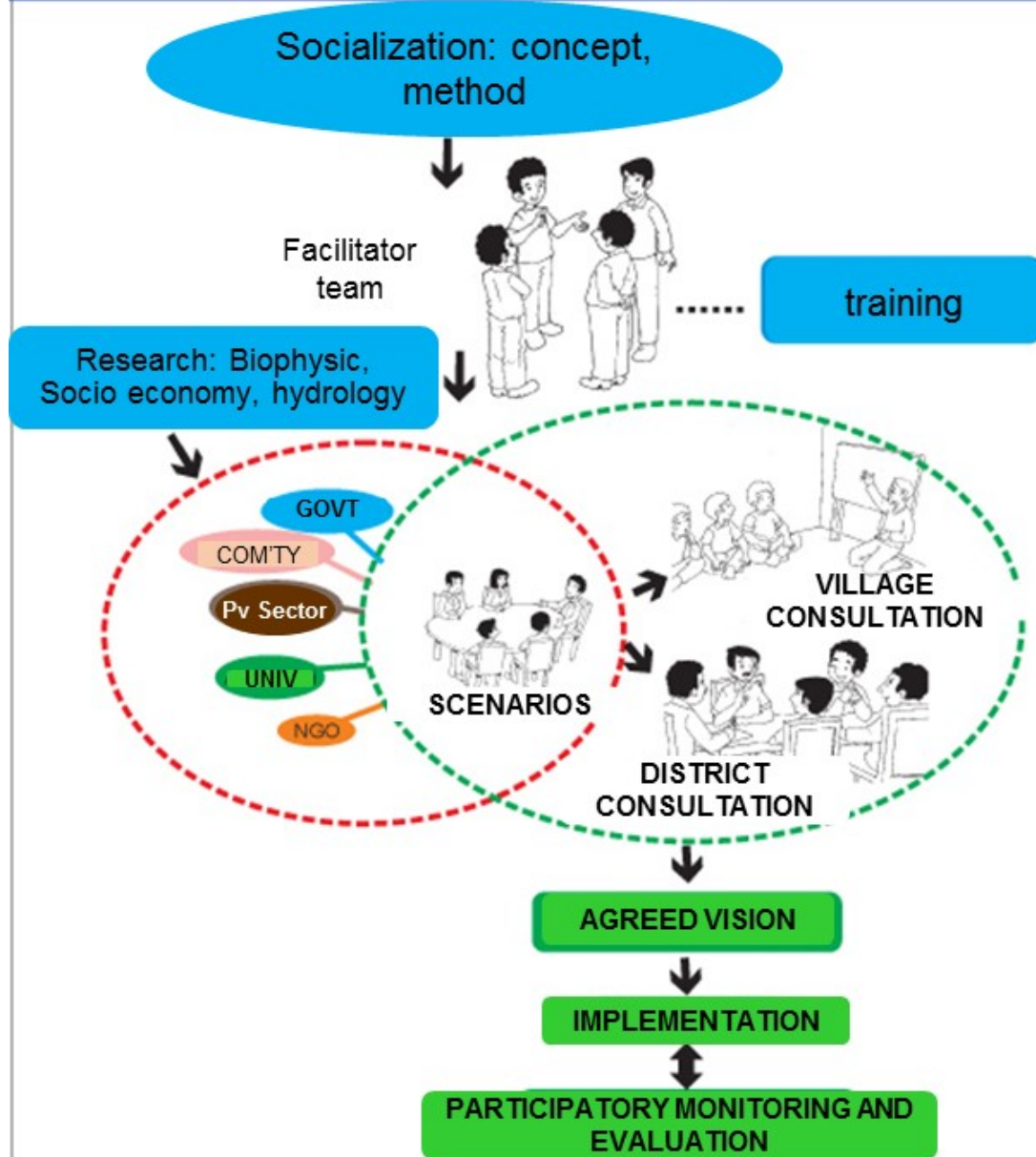❑ The process involved many stakeholders that synergizes different interests on forest management

❑ PPA can improve governance, e.g. inclusive coordination, building trust

❑ Using bottom-up approach, will help the policy maker to better understand the needs of forest stakeholder's

❑ Applicable approach for multi-stakeholders of forward looking forest management

❑ Element of success: involvement of key decisions makers since the beginning

PPA and policy making

PPA approach can be used to improve planning and programme in complex multi-stakeholders environment by:

- Incorporating long-term perspective to better inform decision making processes

- Integrating key drivers for better natural resource management decisions

- Influencing policy makers to integrate aspirations from many groups of stakeholders leading to better coordination between sectors

- The method is replicable, in other situation, other part of the world

- PPA is not only the tools but also new way of thinking

Future challenges

❑ How to ensure non-government stakeholders are equal partner in participatory decision making process?

❑ Embedding participatory forward looking process (PPA) into government system

Thank you

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