Dramas of the CPRs: logical development to take lessons for REDD+ implementation

（共用資源のドラマ：REDDプラスへの教訓を得るための論理的展開）

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Plenty of arguments over safeguard issues, including local people, by experts of REDD+ mechanism…… (>。<)

I'll try a logical development of dramas….

- A new drama of CPRs stimulated by REDD+

  ↓ < to foster the new drama >
- An original drama of sustainable resource use

  ↓ < but when focusing on the forest >
- A hard drama of participatory forest management

  ↓ < then expanding our perspective >
- Implicative drama of sustainable livelihoods

1. A new drama of CPRs stimulated by REDD

Two attributes of Common Pool Resources (CPRs)

- **Low excludability:**
  - It is difficult to exclude individuals from using goods.
  - Similar to 'public goods'.

- **High subtractability:**
  - The benefits gotten by one individual can not be consumed by others.
  - Similar to 'private goods'.

Classification of goods in terms of their attributes

		SUBTRACTABILITY	
		Low	High
EXCLUSION	Difficult	Public Goods	CPRs **vulnerable!*
	Easy	Toll Goods/ Club Goods	Private Goods

Conditions for self-governing associations/ collective actions

- To avoid social losses, the users of a CPR will;
  - ➢ organize themselves
  - ➢ take collective actions
  - ➢ form self-governing associations
  - ➢ under certain conditions.

    → So what are the conditions for it?

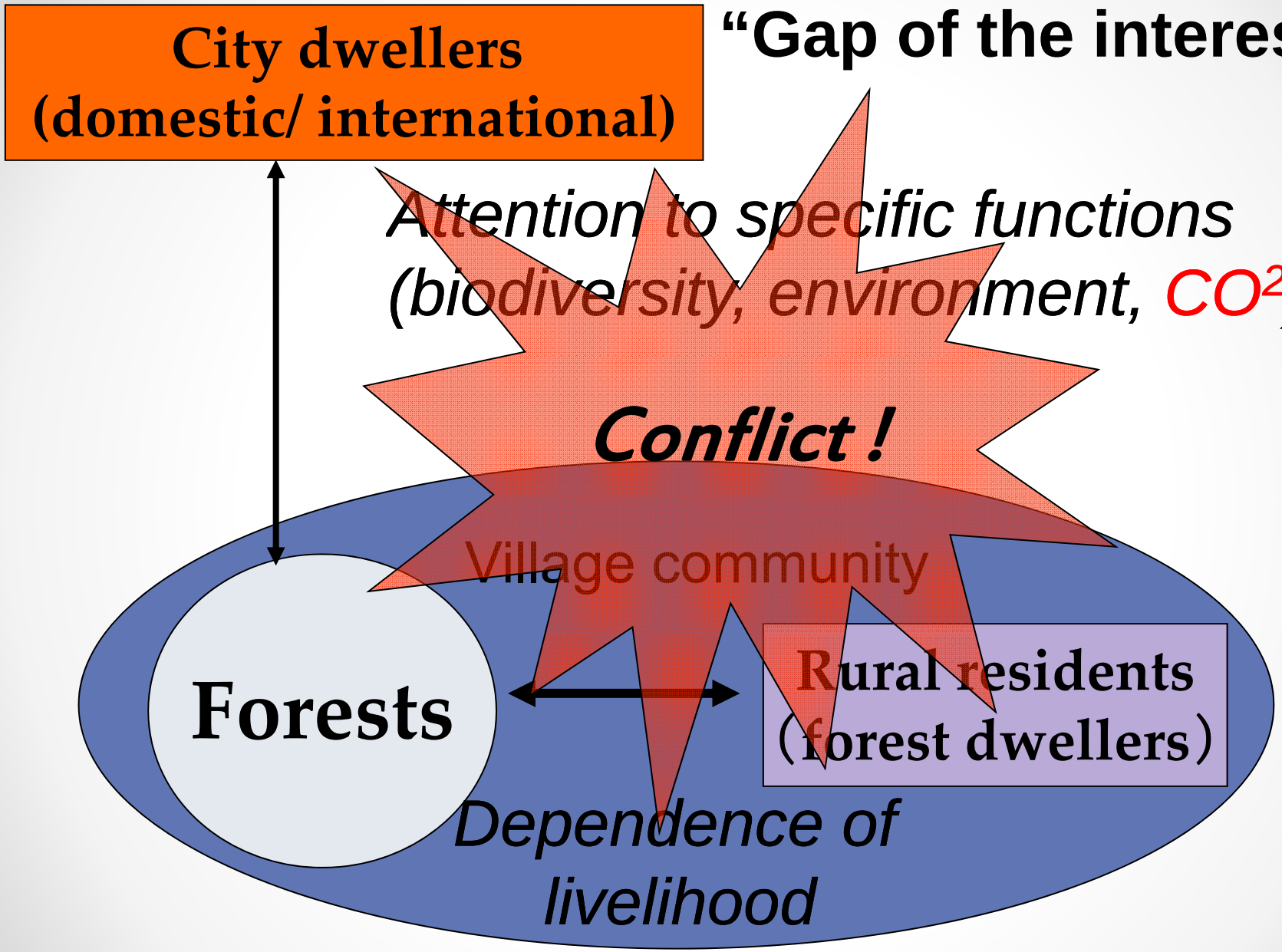
- Some scholars identified factors to help for predicting situation for a successful CPR regime.

  → Ostrom (1990) suggested a list of 8 **design principles** that characterize the configuration of rules devised and used by long-enduring CPR institutions.

'Design Principles' for durable CPR institutions (Ostrom, 1990)

1. Clearly defined boundaries
2. Congruence
3. Collective-choice arrangements
4. Monitoring
5. Graduated sanctions
6. Conflict-resolution mechanisms
7. Minimal recognition of rights to organize
8. Nested enterprises (for CPRs that are part of larger systems)

→ This issue is argued here.


City dwellers
(domestic/ international)
"Gap of the interest"
Attention to specific functions
(biodiversity, environment, CO^2)
Conflict !
Village community
Forests
Rural residents
(forest dwellers)
Dependence of
livelihood

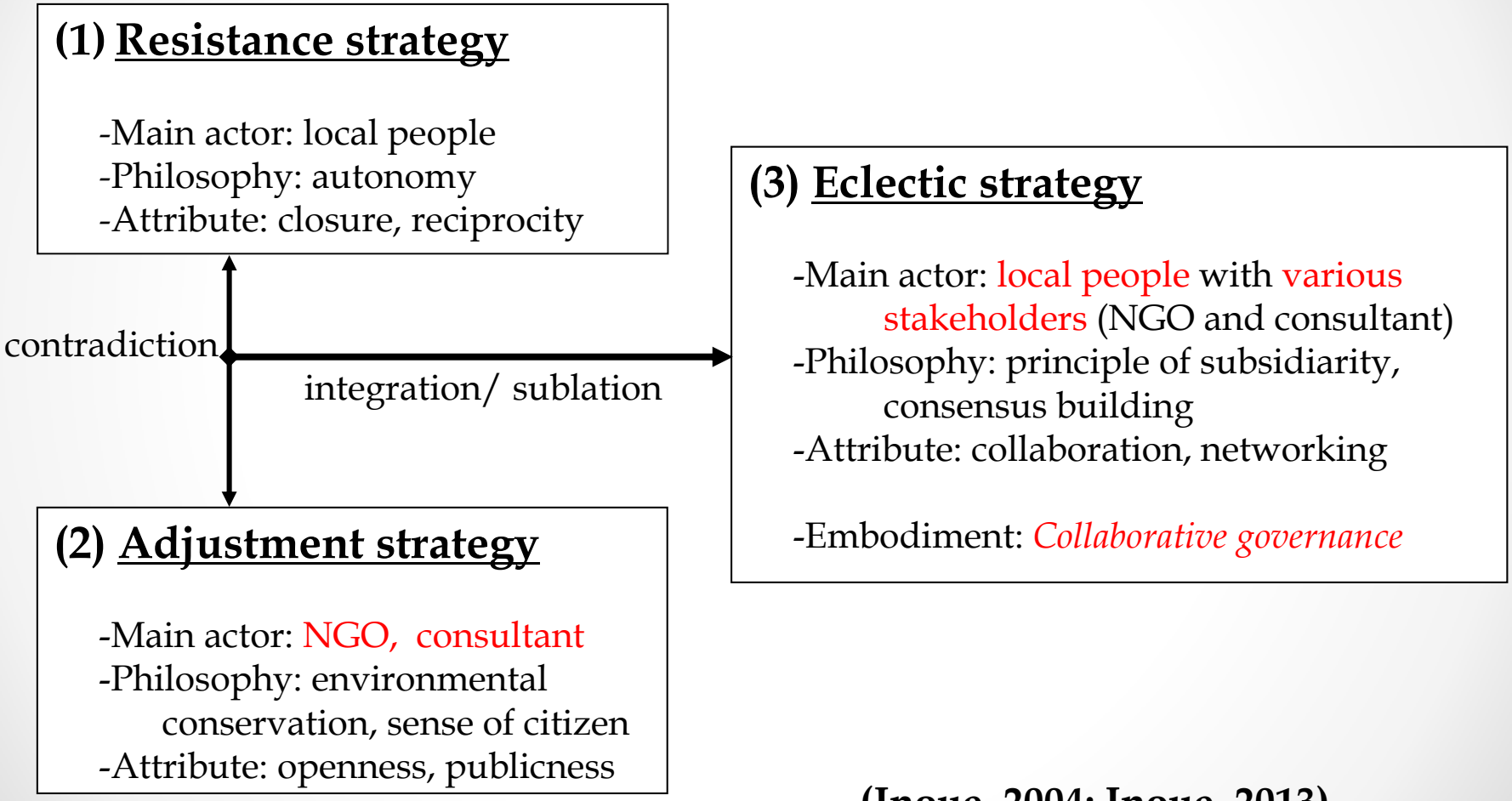
Three strategies for sustainable resource use & management (Inoue, 2004; Inoue, 2013)

1. **Resistance strategy**
   - People do not adapt to globalisation and mostly refuse involvement by outsiders in order to preserve their autonomy.
   - Attribute: closure

2. **Adjustment strategy**
   - People assimilate the benefits of globalisation.
   - Attribute: openness

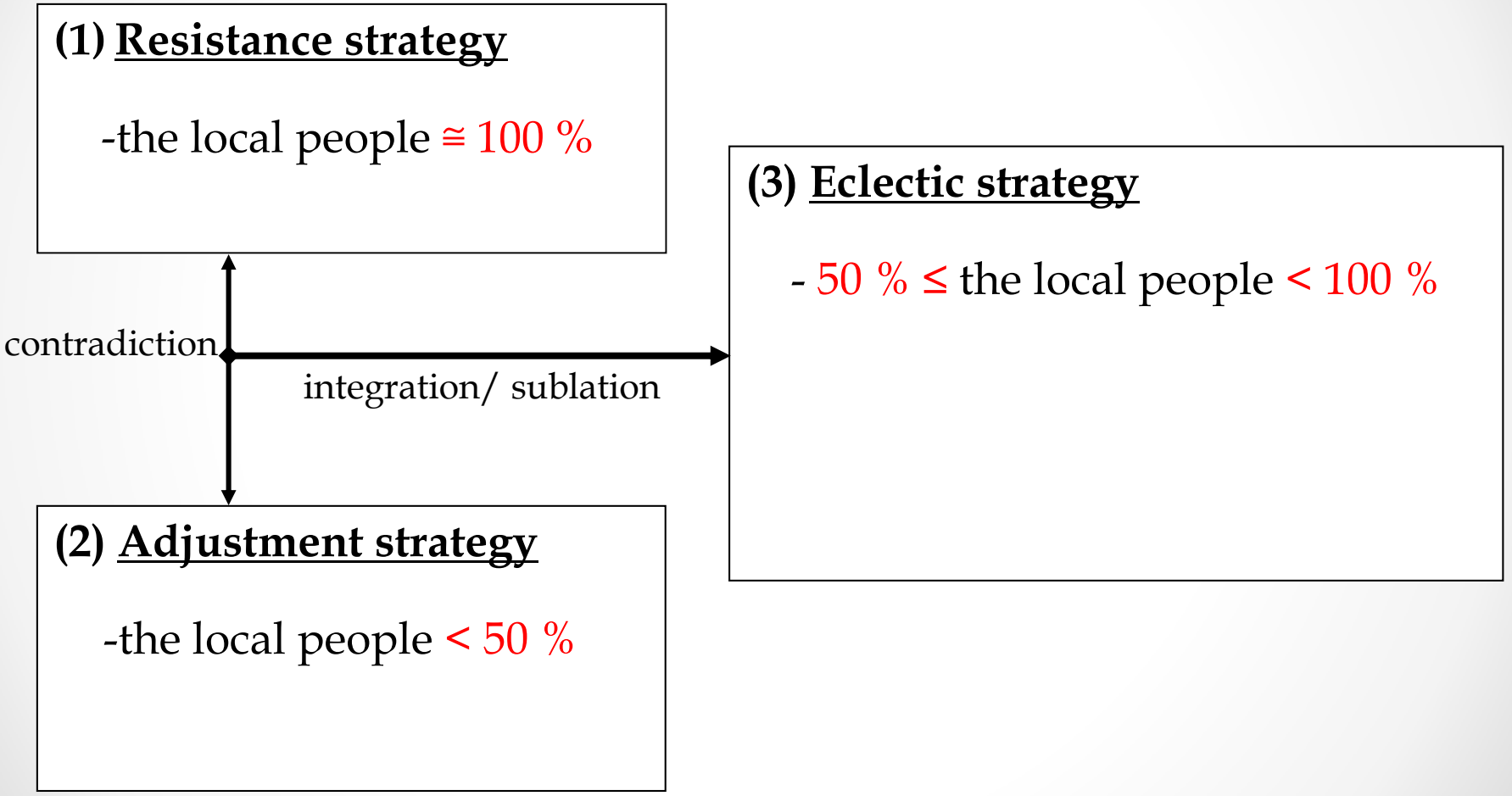
3. **Eclectic strategy**
   - A compromise that incorporates a partial resistance strategy and limited adjustment strategy.
   - '***Collaborative governance***' of natural resources could be achieved under this strategy.
   - This type of governance is organised through collaboration among various stakeholders who have a range of interests in local resource use and management.

Collaborative governance as an eclectic strategy for resource use & management

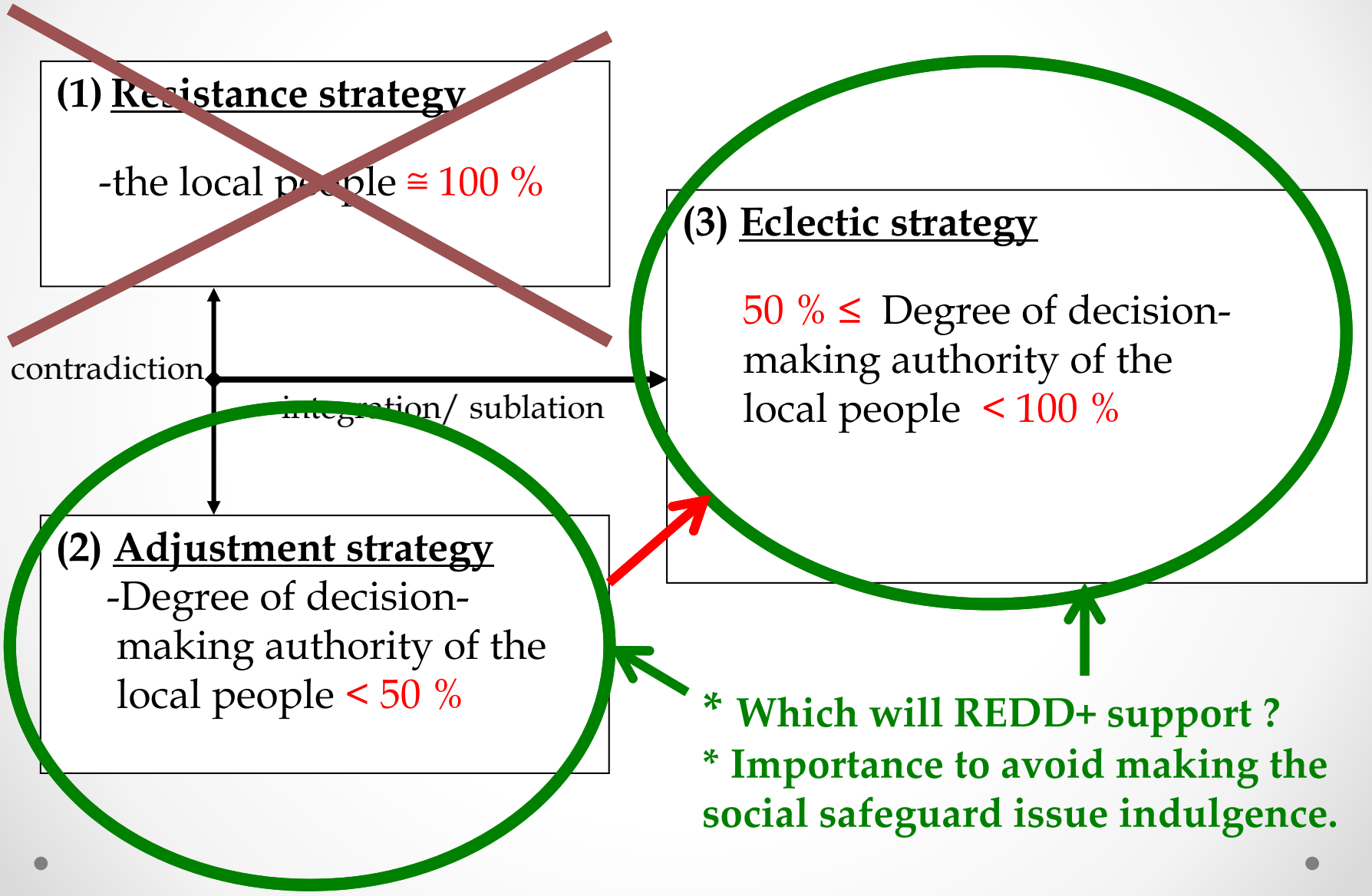


(Inoue, 2004; Inoue, 2013)

Degree of decision-making authority of the local people



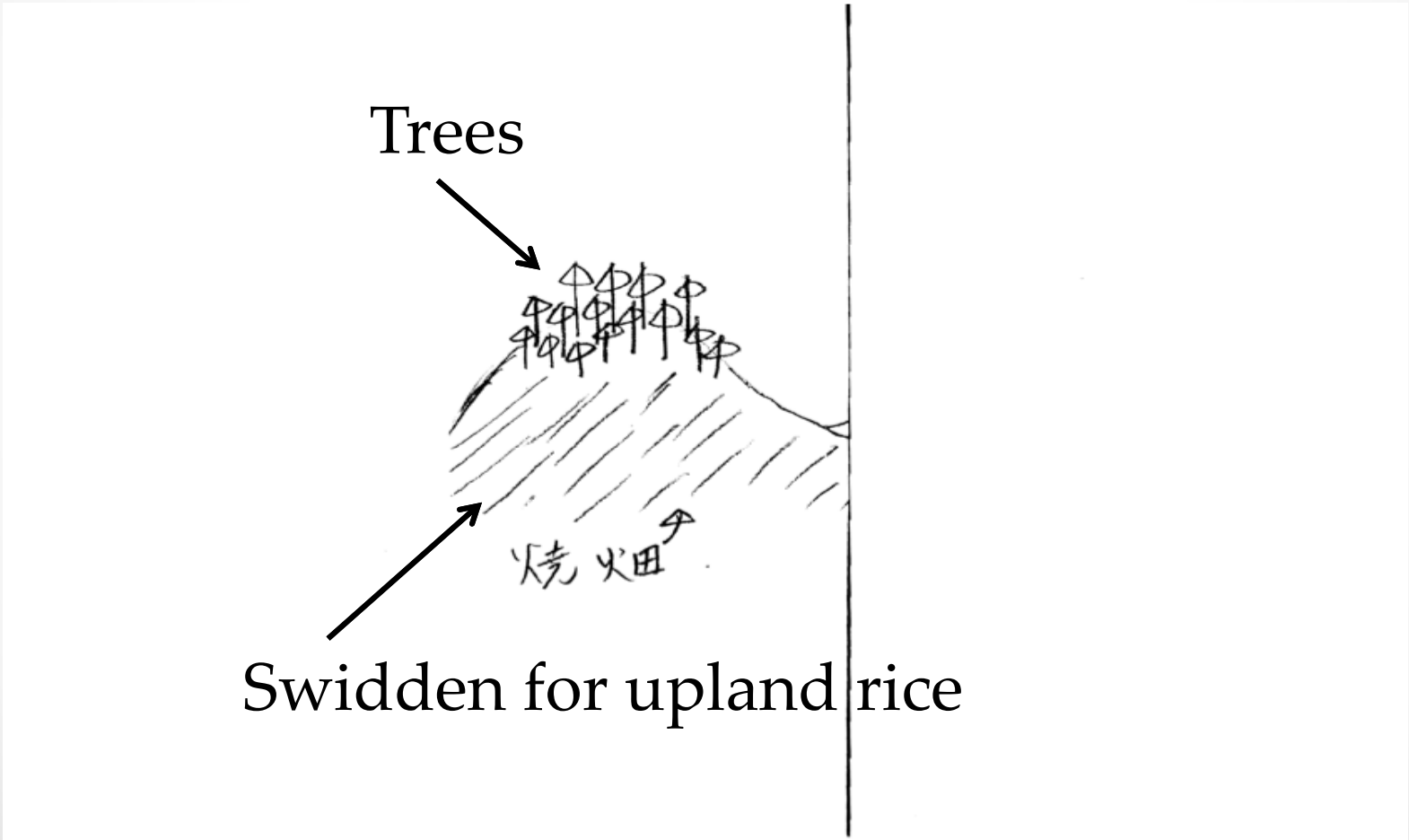
Which will be a new drama?: Implication for REDD+



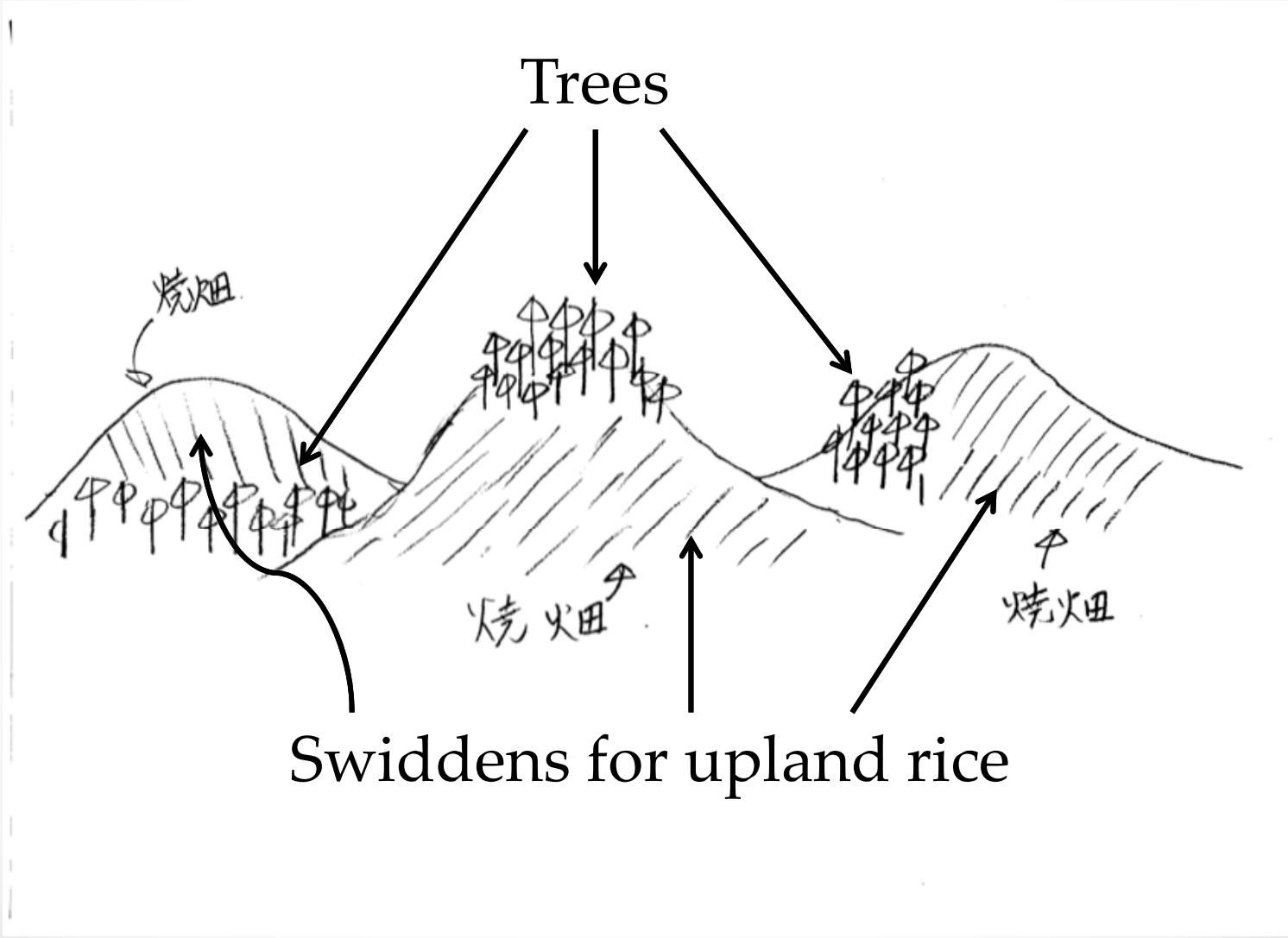
2. An original drama of sustainable local resource use

Various uses of rattan basket by the Kenyah in East Kalimantan

A picture shown by a scholar in 1987 at Samarinda, or a capital city of East Kalimantan



Reality in Apo Kayan, or central plateau of Borneo island



Questions

- Was understanding of the scholar wrong?
  ← Field reality denied the explanation by the scholar.
- How do the Kenyah people explain their local praxis?
  →"I stopped cutting trees because I have already got enough area of swidden for this year."
- For other praxis ,such as rotation system of swiddens, how do they explain the reason?
  →"To reduce labor input for weeding is the most important factor to keep the rotation."
- Importance to discover the gap in between emic and etic perspectives

Category of sustainable resource utilization (Inoue 1998; Inoue 2000; Inoue 2011)

- **Haphazard su/偶発的なsu**: the mode of utilization whereby unconscious action brings about sustainable use of resources.
- **Incidental su/副産物としてのsu**: the mode of utilization whereby conscious actions for other purposes achieve sustainable use.
- **Intended su/意識的なsu**: the mode of utilization whereby sustainable resource management is intended. Some regulations are incorporated into customary law.

Ex) Haphazard: Trees left in the swiddens (to prevent soil erosion)

Ex) Incidental: Rotation system of the swiddens (avoiding weeding → longer fallow period → sustainability)

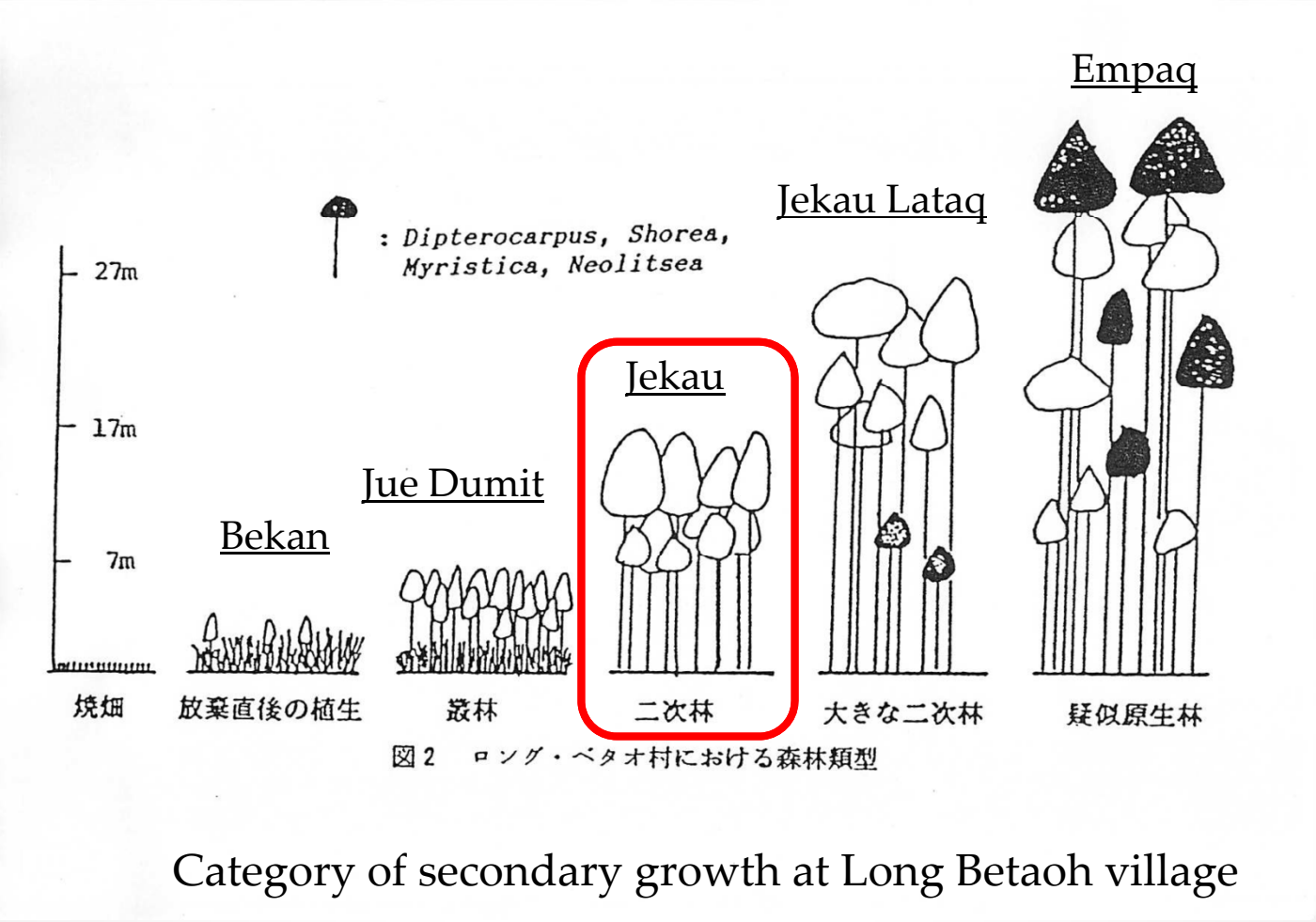


図2　ロング・ベタオ村における森林類型

Category of secondary growth at Long Betaoh village

(Inoue, 1990)

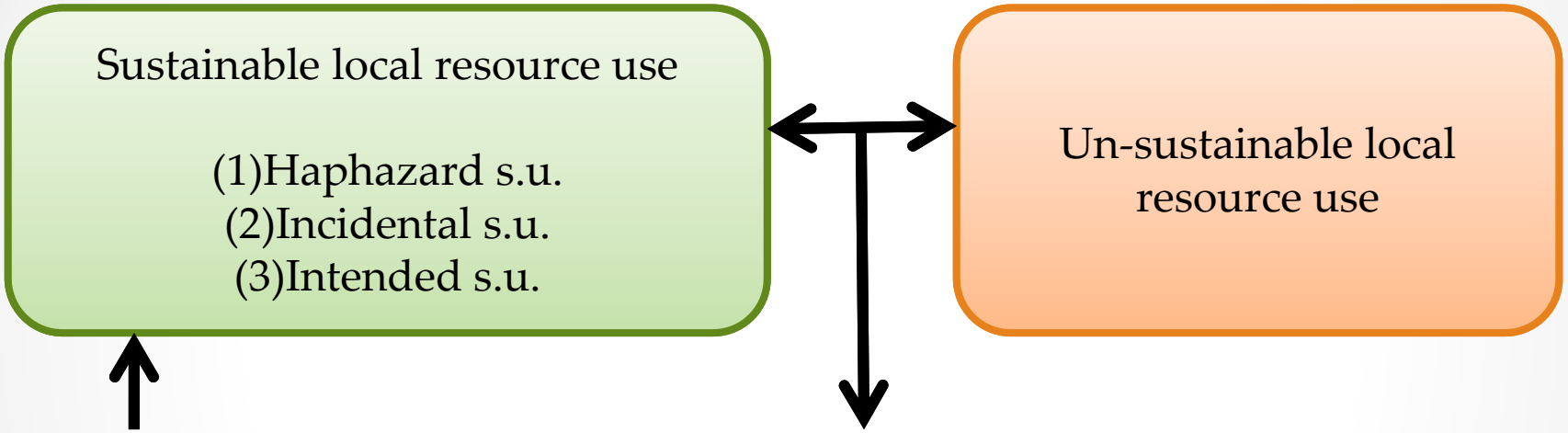
Ex) Incidental: Spiritual tree (not cut to avoid calamities→ conservation)

Ex) **Intended:** Iriai-rin (communal forests) in Japan
(tight regulations in terms of tools, seasons and species, etc.)

Ex) **Intended:** Tana' ulen (customary forest) by the Kenyah in Kalimantan

(loose regulations to the trees marked by a member)

Can the local people create an original drama?: Implications for REDD+



Great possibility to collaborate with
- though concrete measures will be varied according to the category.

Both are realities
- Neither the culprit nor the innocent
- Neither always conservator nor destroyer

The local people as stakeholders of REDD+:

× Main drivers/culprit of deforestation and forest degradation

○ Main players/partners for SFM and forest conservation

3. A hard drama of participatory forest management (PFM)

PFM's challenging road to REDD+

- Is REDD+ activities through incentivizing forest conservation under existing PFM regimes promising?

- Mainly degraded and/or low value forests (Inoue, 2004; Ribot et al., 2006) ← forests are of little or no interest to powerful actors →difficult to maintain

- Many and small in size → increases transaction costs per ton on CO^2 sequestered (Balooni & Lund, 2013)

- Deforestation outside 'conservation islands' (partially 'leakage') → also occurs in the countries as global leaders in decentralized forest management (Balooni & Lund, 2013)

Evidence: Statistics from five global leaders in decentralized forestry (Balooni & Lund, 2013)

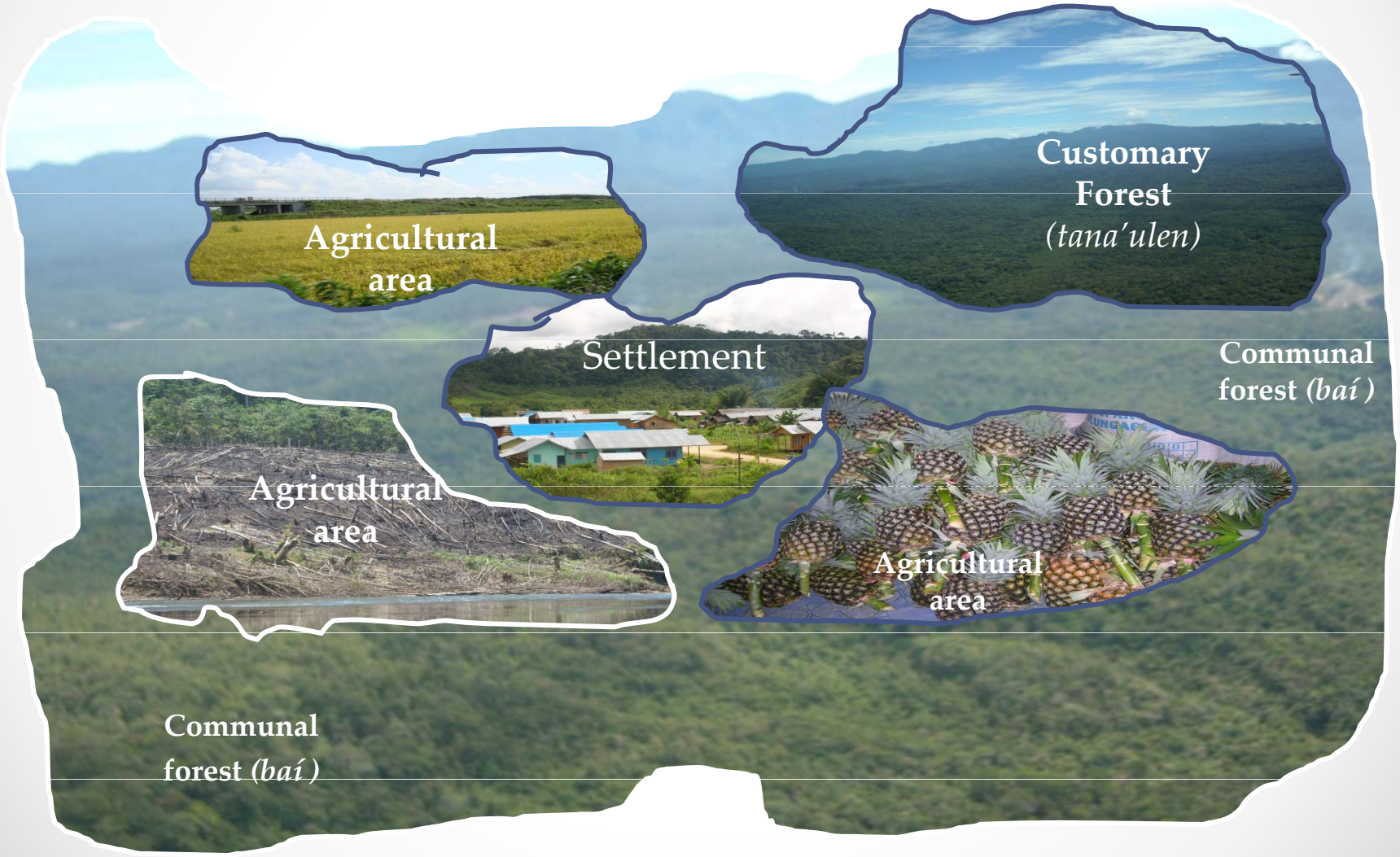
Country	Program	No. of decentra-lized manage-ment units	Average forest size per manage-ment unit (ha)	Share of forest area under decentralized management (%)	Annual forest area change rate during 2005-2010 (%)
India	JFM	112,816	218	36	4.66
Nepal	CF	17,685	93	45	-6.77
Philippines	CBFM	1,786	907	21	7.7
Mexico	Ejidos	8,400	5400	70	-2.92
Tanzania	CBFM, JFM	2,323	1,775	12	-10.77

Many

Small

Deforestation happened

4. Implicative drama of sustainable livelihoods, based on various land uses



Case study: main land uses

Traditional land uses:

swidden, rattan garden, traditional rubber garden, orchard

New land uses:

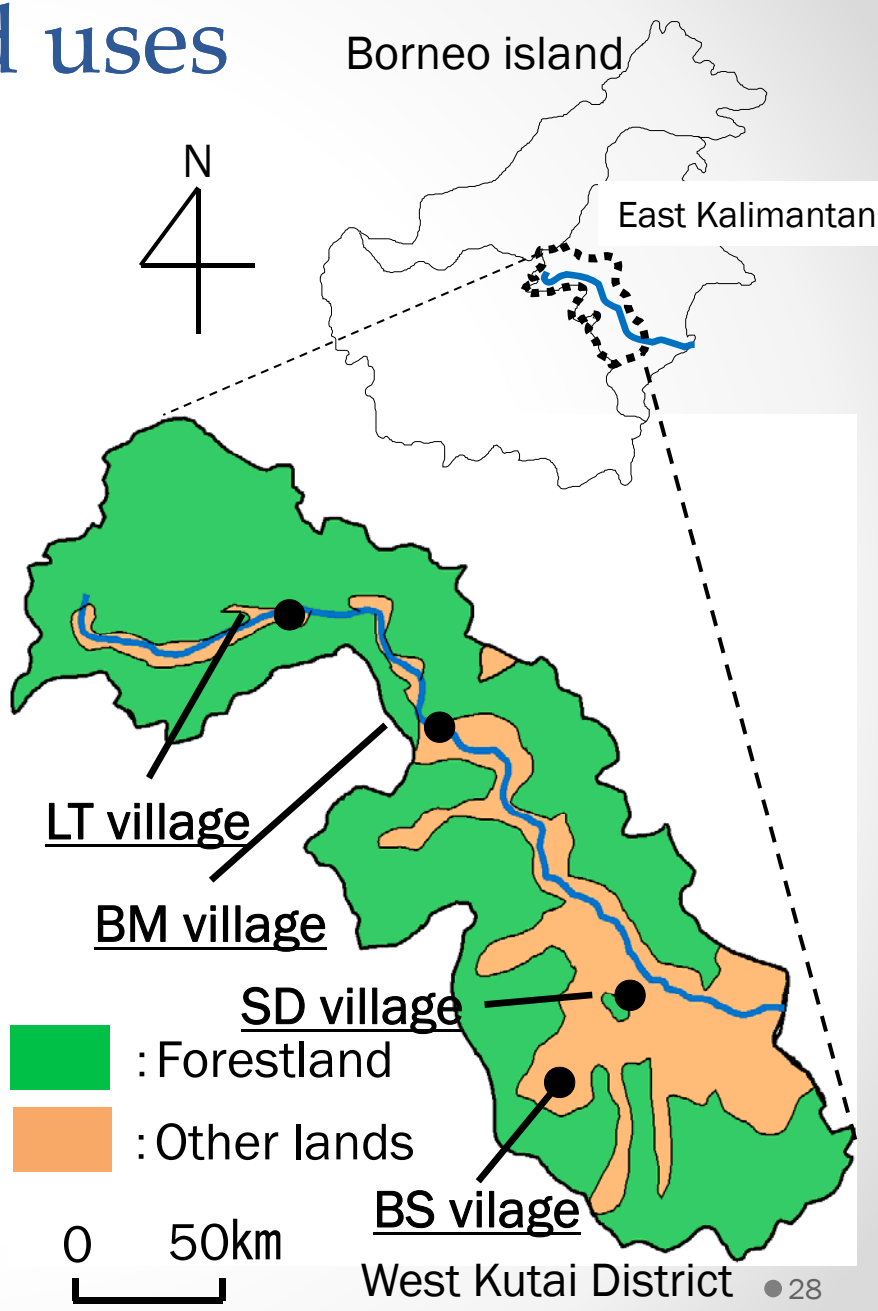
rubber plantation, cacao garden, oil palm plantation

Oil palm plantation in W.K.D.:

Planned area: 62% of other land

National program::

- Land allocation: company-80%, villagers-20%



Traditional land uses

Rubber garden

Rattan garden

Orchard

Swidden agriculture

New land uses

Cacao garden

Rubber plantation

Oil palm plantation

*Oil-palm plantation,
managed by private company,
needs at least 3,000 ha
to get benefit.

Peoples' preference of land use

(Inoue et al, 2013)

Ranking	LT village	BM village	BS village	SD village
1st	Swidden agriculture	Rubber plantation	Traditional rubber garden	Rubber plantation
2nd	Traditional rubber garden	Traditional rubber garden	Swidden agriculture	Traditional rubber garden
3rd	Rubber plantation	Cacao garden	Rubber plantation	Swidden agriculture
4th	Cacao garden	Swidden agriculture	Orchard	Orchard
5th	Orchard	Orchard	Rattan garden	Oil-palm plantation
6th	Rattan garden	Oil-palm plantation	Oil-palm plantation	Rattan garden
7th	Oil-palm plantation	Rattan garden		

Results
(Terauchi et al, 2010; Inoue et al, 2013)

- Rubber plantation & traditional rubber garden: high preference ← because of high profitability
- Swidden agriculture: high & medium preference ← important in terms of staple food security
- Orchard: medium preference ← because of medium profitability
- Rattan garden: low preference → but still important as safety-net because of flexibility of production
- Oil-palm plantation: low preference ← because of social anxiety though expecting high profitability
- Combination of various land use ← in accordance multiple livelihood needs ← based on respective attributes of each land use

Policy Implication for REDD+
(Terauchi et al, 2010; Inoue et al, 2013)

- Desirable institutional/project design:
  - be profitable,
  - be implemented without social anxiety,
  - be expected to satisfy various livelihood needs,
  - not only on forest land but also non-forest land (agricultural land, etc.),
  - on condition that safety-net (forest ecosystem, swidden agriculture) for their livelihood is ensured.

  → What is 'livelihood'?

Livelihood

(Chambers and Conway, 1992; DFID, 1999)

- Definition
  - A livelihood comprises the capabilities, assets and activities required for a means of living.
- Sustainability of the livelihood
  - A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base.
- Four dimensions for analysis
  - Environmental / Economic / Social / Institutional

Messages to REDD+ experts from four dramas

- Degree of decision-making authority of the local people :
  - hopefully be increased
- Shift of REDD+ experts' mindset, based on the local reality :
  - the local people: as main drivers/culprit of deforestation
  - → as principal players/partners of forest conservation and sustainable forest management
- Difficulties of Participatory Forest Management:
  - Allocation of degraded and/or low value forest
  - High transaction cost ← many, and small size
  - Deforestation outside 'conservation islands'
- Institutional design:
  - Livelihood-oriented institution, including variety of activities on both of agricultural and forest lands

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Thank you for your attention!

Children in Laos