Presentation given at the Southeast Asia Katoomba meeting

# Katoomba XVII
# Taking the Lead: Payments for Ecosystem Services in Southeast Asia

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# Lessons Learned from Facilitating Linkages Between ES Buyers and Sellers: RUPES Experience

**Katoomba Meeting**
**Hanoi, Vietnam**
**23-24 June 2010**

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World Agroforestry Centre
TRANSFORMING LIVES AND LANDSCAPES

RUPES
REWARDS FOR, USE OF AND SHARED INVESTMENT IN PRO-POOR ENVIRONMENTAL SERVICES

# RUPES started in 2002

**Goal : To enhance the livelihoods and reduce poverty of the upland poor while supporting environmental conservation on biodiversity protection, watershed management, carbon sequestration and landscape beauty at local and global levels.**

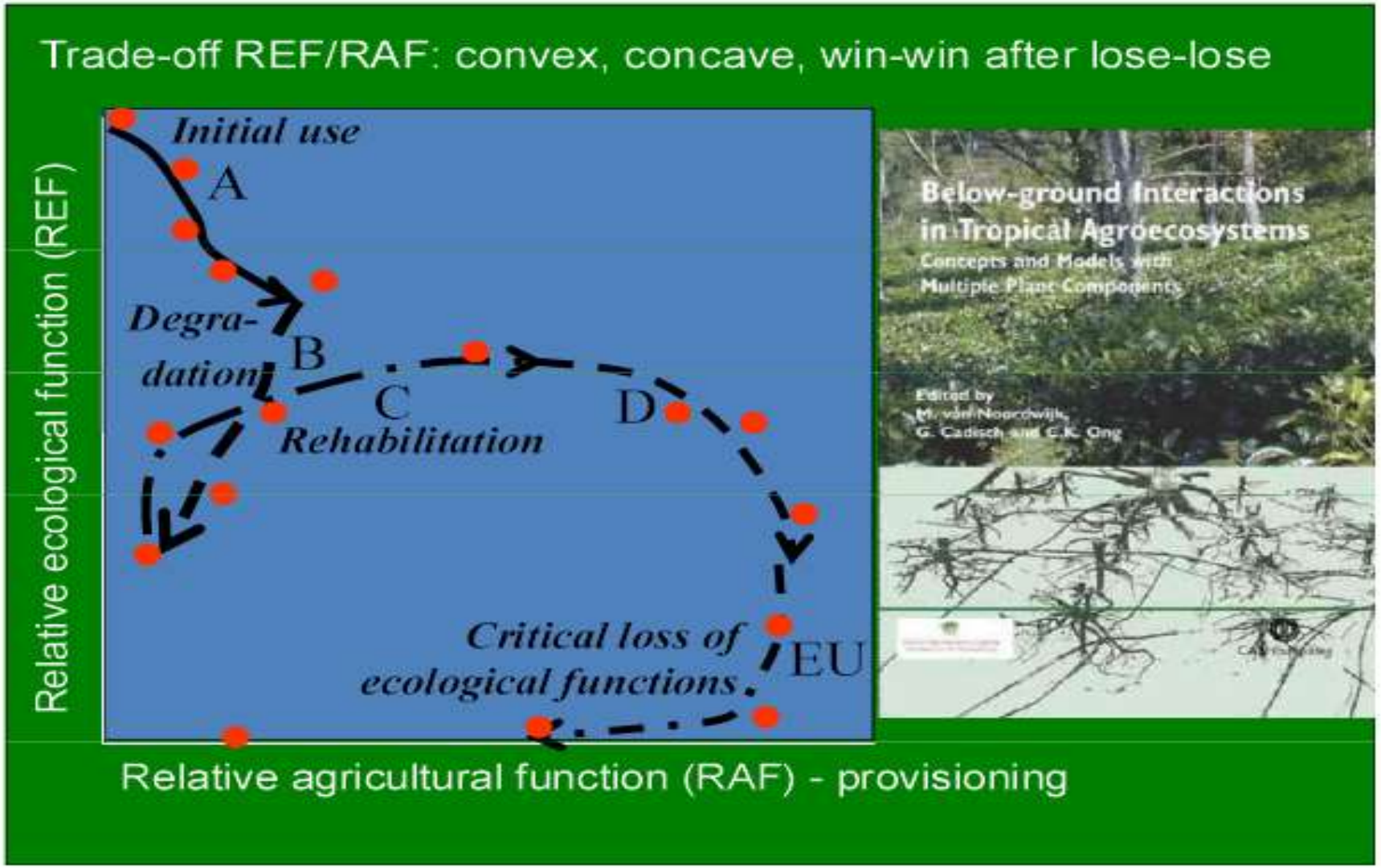


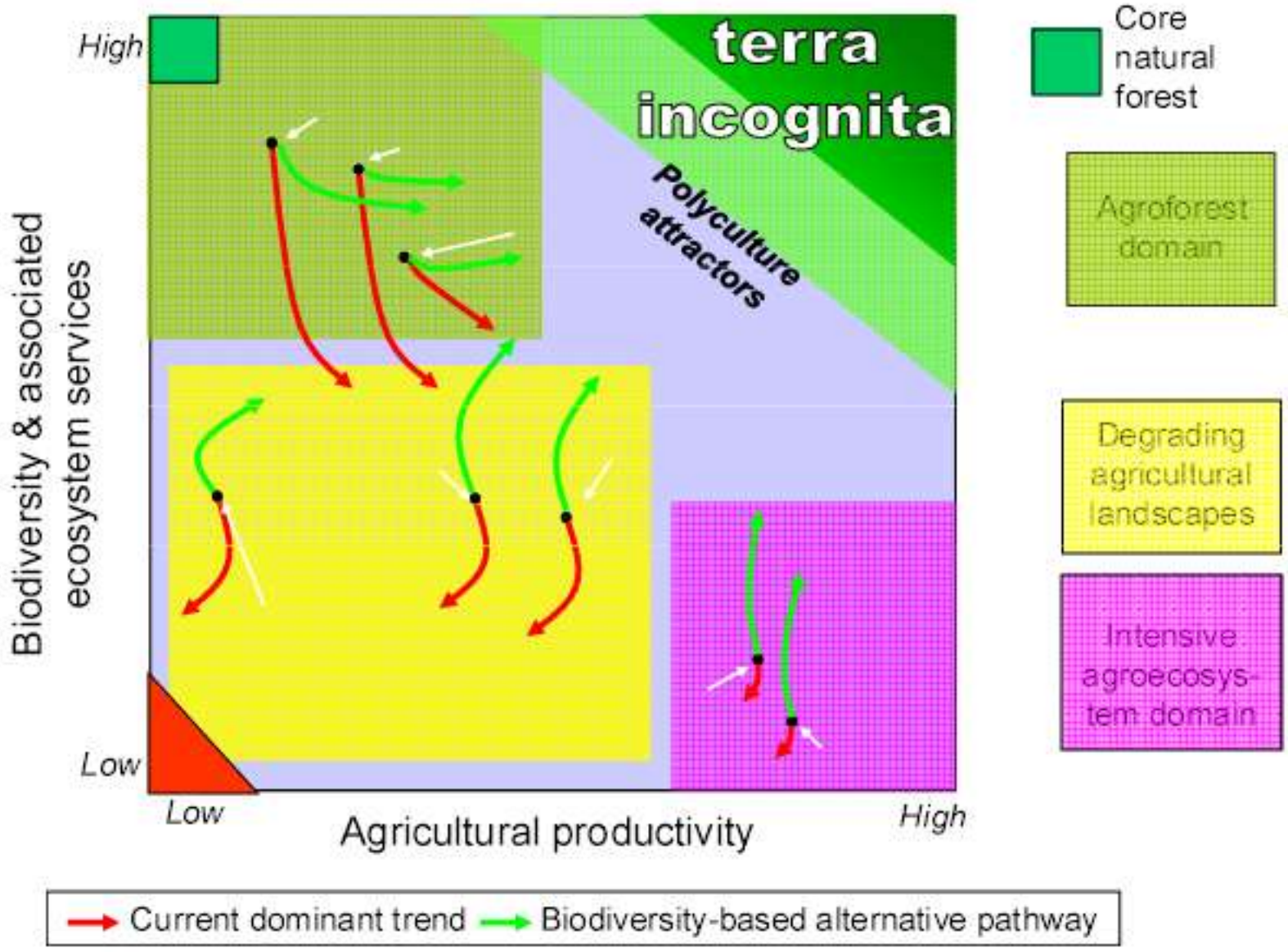
http://www.worldagroforestry.org/sea/networks/rupes/index.asp

10 pointers for boundary agents' facilitating linkages and negotiating between ES sellers and buyers, derived from three learning areas:

- Sustainagility
- Linking knowledge with action
- PES paradigms

# Context:
# Ecosystem services: the benefits people obtain from ecosystems




terra incognita
Polyculture attractors
High
Low
Low
High
Biodiversity & associated ecosystem services
Agricultural productivity
Core natural forest
Agroforest domain
Degrading agricultural landscapes
Intensive agroecosys-tem domain
Current dominant trend
Biodiversity-based alternative pathway

# 1. Sustainagility


High efficiency (the place provides a nice view on a neighbouring waterfall)

Sustainability is ok, (1 m of supporting services…)

Sustainagility question-able, don't jump around…

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# You are never too big not to be agile


## Sustainagility for adaptation

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# Adaptive capacity,

## according to Wikipedia, is

- the capacity of a system to adapt if the environment where the system exists is changing.

In human social systems, it is determined by :

- the ability of institutions and networks to learn, and store knowledge and experience.
- creative flexibility in decisionmaking and problem solving
- the existence of power structures that are responsive and consider the needs of all stakeholders

In ecological systems, it is determined by :

- genetic diversity of species
- biodiversity of particular ecosystems
- heterogeneous ecosystem mosaics as applied to specific landscapes or biome regions

**In the context of climate change, adaptive capacity is "the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences"**

**Resilience according to the most popular WWW sources:**

- The physical property of a material that can return to its original shape or position after deformation that does not exceed its elastic limit
- an occurrence of rebounding or springing back
- Resilience in psychology is the positive capacity of people to [illegible]
- The positive ability of a system or company to adapt itself to the consequences of a catastrophic failure caused by power [illegible]

**beyond resilience to status quo...**

**the world wants or cannot avoid**


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Sustainagility is defined as the properties and assets of a system that sustain the ability (‘agility’) of agents to adapt and meet their needs in new ways.


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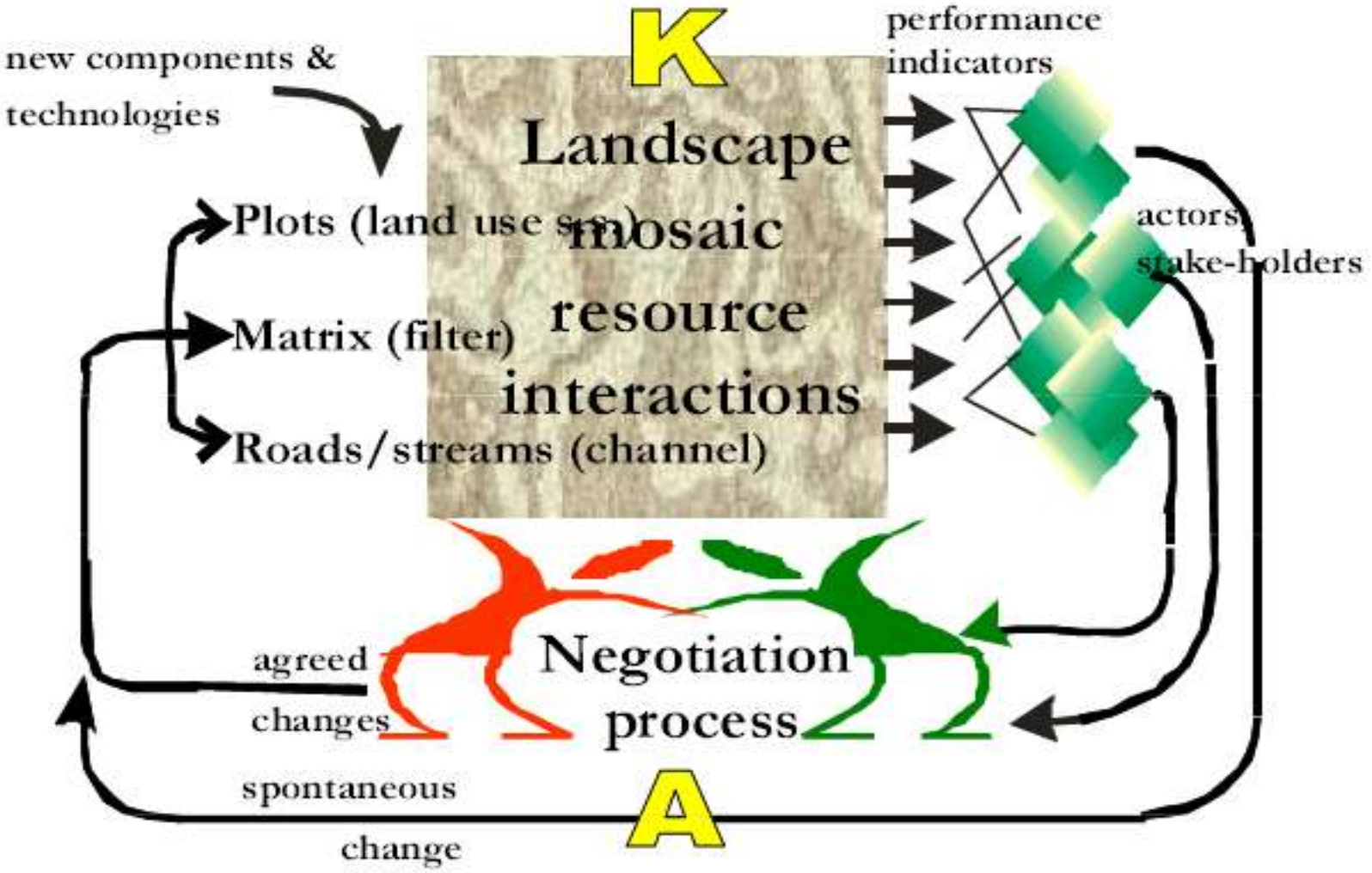
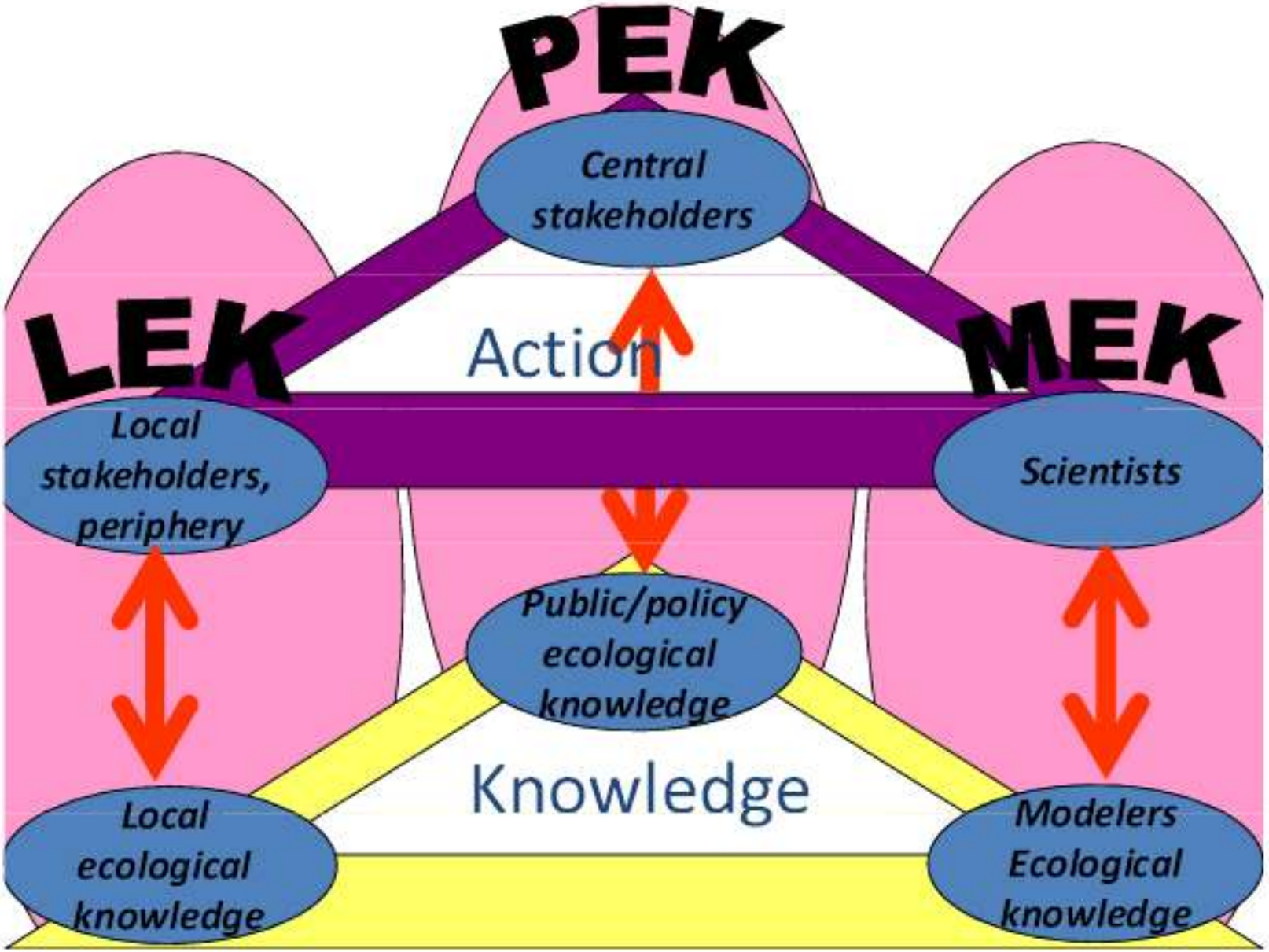
# 2. Linking knowledge with action




Negotiation Support System: tool + process

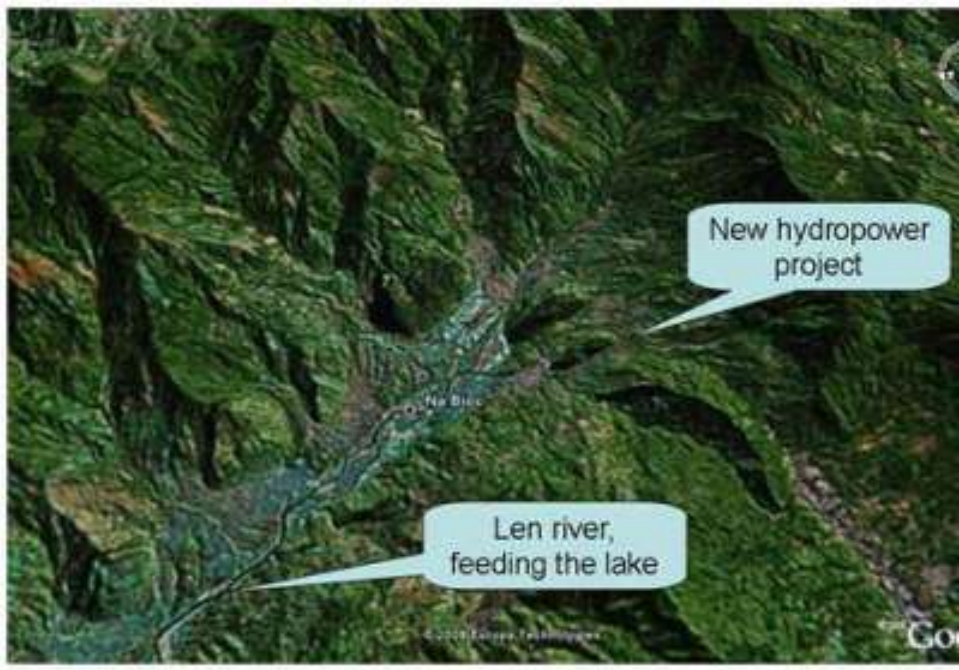

PEK
Central stakeholders
LEK
MEK
Action
Local stakeholders, periphery
Scientists
Public/policy ecological knowledge
Knowledge
Local ecological knowledge
Modelers Ecological knowledge

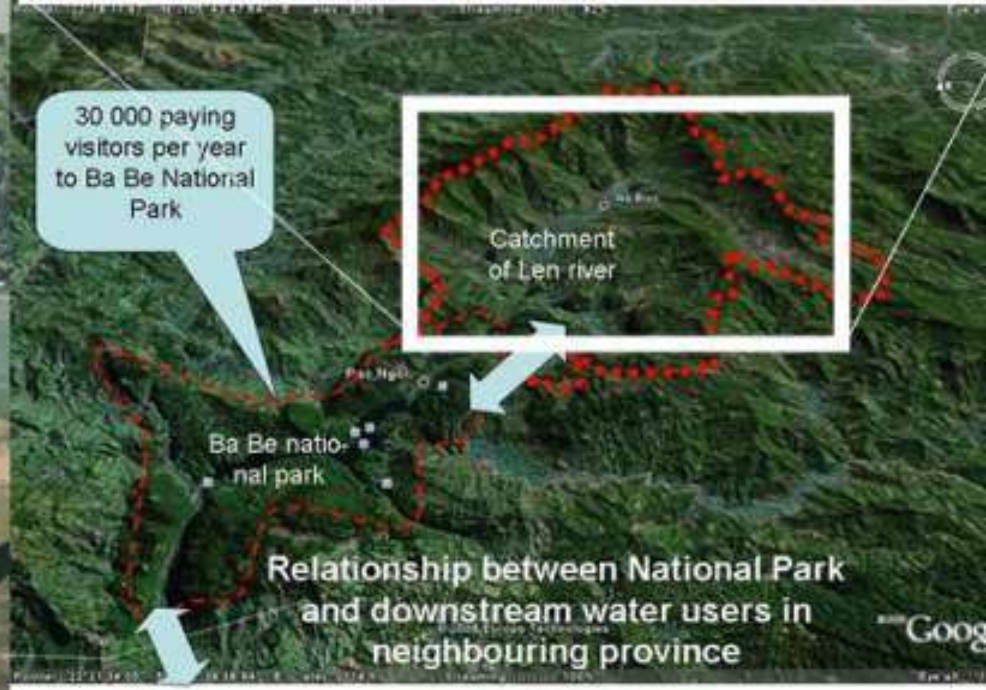

## Case 1: Leng River Watershed, Ba Be District, Bac Kan Province, Vietnam

- Rapid Hydrological Appraisal (RHA)
- Participatory Landscape Appraisal (PaLA)
- Rapid Carbon Stock Assessment (RaCSA)

# RES/PES can provide alternative income for local people when shifting cultivation is stopped






Na Hang hydropower station (342,000 kw/h)

# Different knowledge and expectations need to be reconciled by multiple actors to agree on appropriate actions!

- Stakeholders (district, commune, village levels) perceived that upstream forest cover relates closely with water availability downstream.
- Spatial analysis of the whole Leng river watershed revealed more forest in downstream communes than in the upstream commune of Dong Phuc.
- Forest protection and conservation was considered by both upstream and downstream villages as main solution for long-term water conservation, with building irrigation channels for better water distribution as a short term solution.

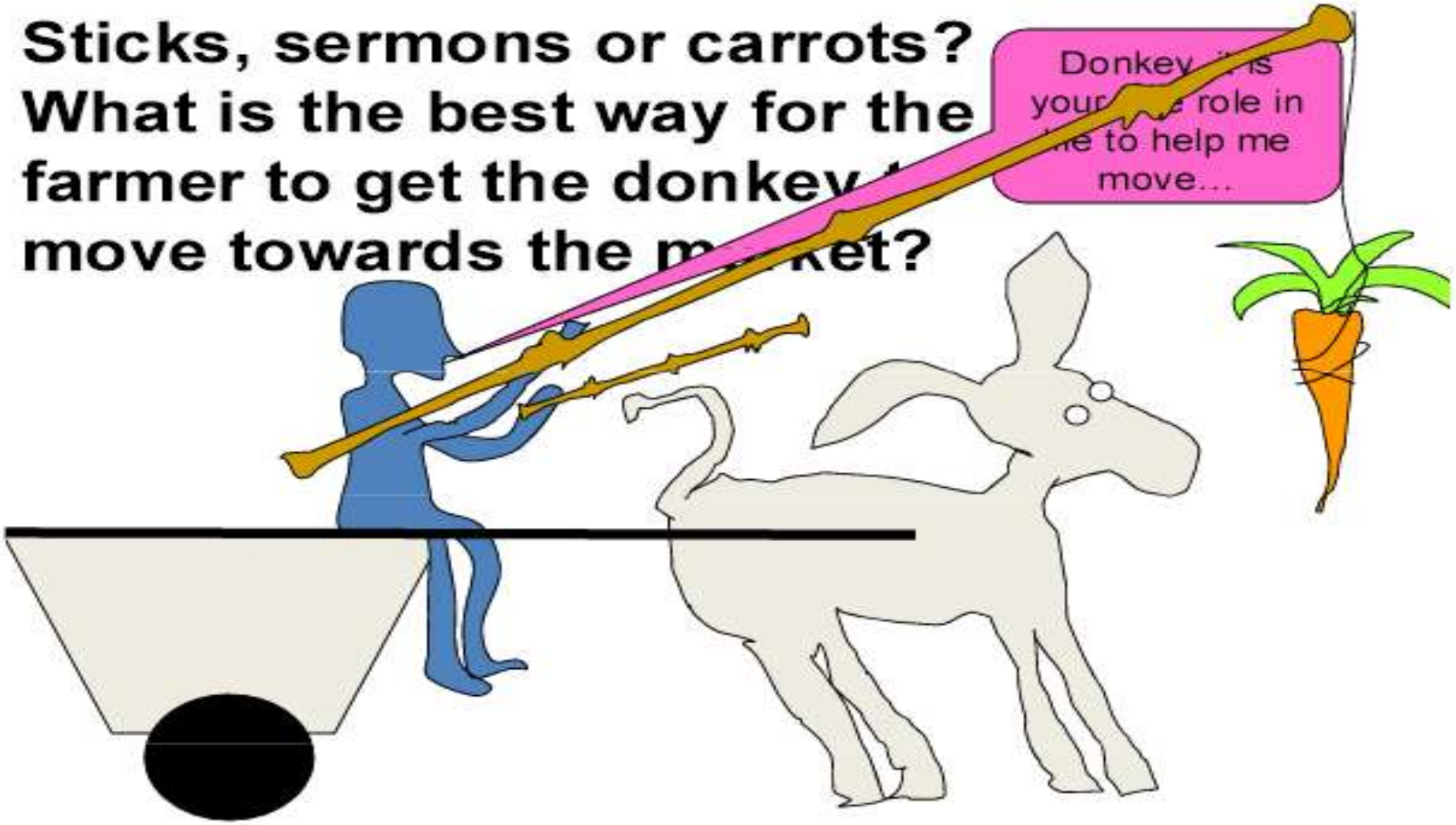
# 2. Emergence of Payments for Watershed Servi-ces in Singkarak (W. Sumatra, Indonesia)


*to success*

# Impacts 2 years after RHA Singkarak

| *Before RHA Singkarak* | *After RHA + disc.* | |
|---|---|---|
| • Deforestation seen as the main culprit of all problems, including blackouts | • Focus on lake & its water quality; adjust scale of institution | *New LGU forum* |
| • Tree planting as main solution | • More awareness of climatic dependence | |
| • Village with most tree cover should get highest share in royalties | • Less blaming the upland deforestation for blackouts | |
| • Problems with the Ikan bilih fish linked to deforestation | • Less focus on 'tree planting' as the only or main solution | |
| | • More care in planning coffee re-intensification: Kopi Ulu | *Now with ICCRI support* |
| | • Ikan bilih problem is about breeding grounds & overfishing | *Riparian tree focus* |

# 3. PES Paradigms



# RUPES-I synthesis ***

| Paradigm A: ***'Commoditized ES'*** or markets for commoditized environmental service procurement (or land use proxies with periodic full impact study) | Paradigm B: ***'ES Opportunity Costs'*** or compensating/ paying land users for accepting mandatory/ voluntary restrictions on their use of land | Paradigm C: ***'Co-investment in ES assets'*** and co-management of landscapes for reducing poverty and enhancing ES, sharing risk and responsibility |
|---|---|---|
| 'Real' ES, recurrent | Proxies, recurrent | Plans/ACM, investment |

Conditionality

# Case 1: Potentially CIS
# Len River basin, Ba Be, Bac Kan, Vietnam

Core area of 10,048 hectares; Buffer zone of 34,702 hectares

Land conflict is a serious problem between the park and local ethnic shifting cultivators living in buffer zone

**Carbon and water** are defined as two environmental services that are linked closely in the upper part of the watershed and sub-watersheds.

**Upstream forest protectors are ES providers and downstream rice cultivator are ES users**. Forest and deforestation was perceived as the main causes linked closely with water availability for rice cultivation in the lower part of each catchment/sub-catchment.

**Benefit sharing, MVR within community level is under development**

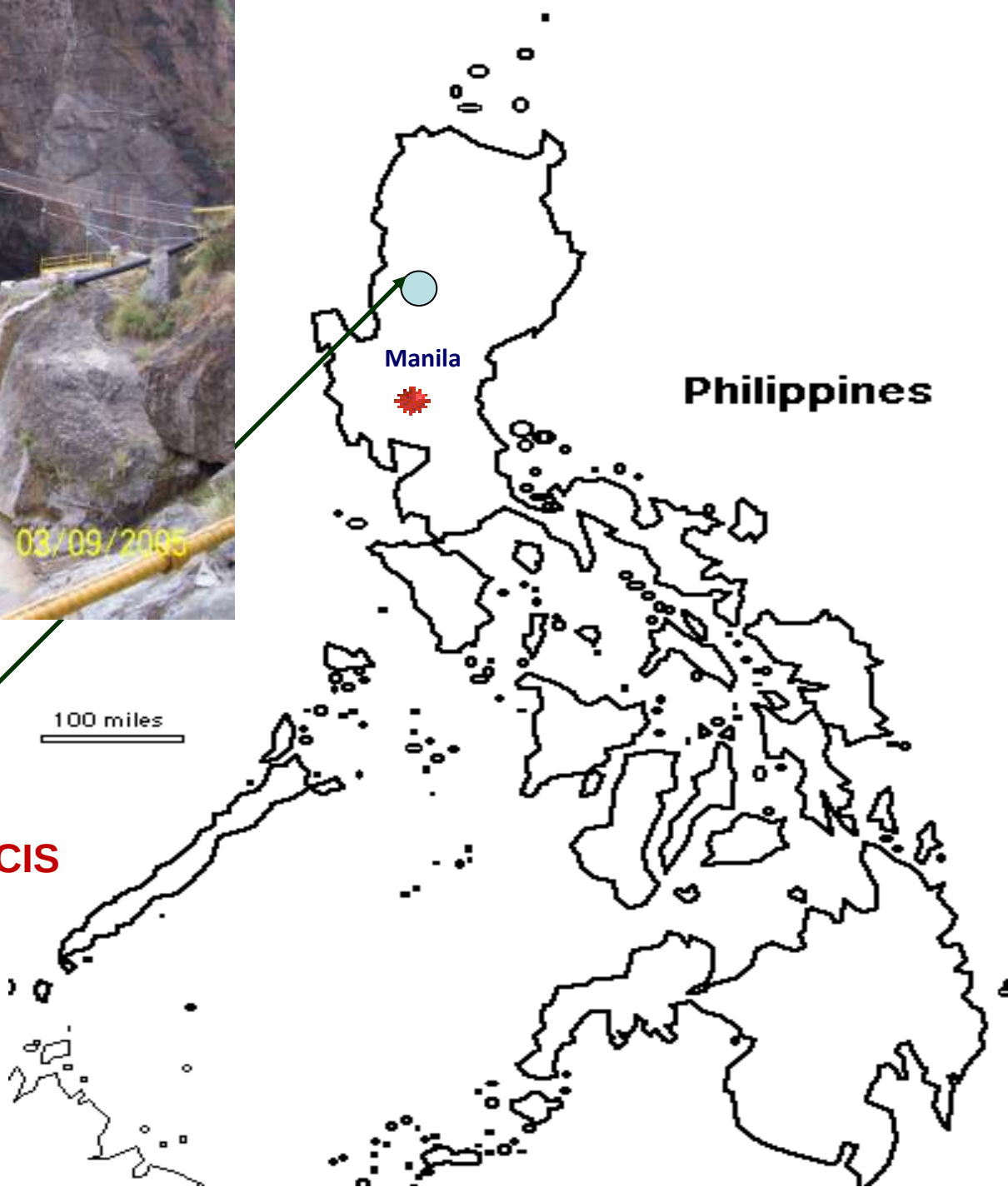

Leng river watershed (22016' N - 22028 N and 105034' E to 105047 E) is in Ba Be district, which covers about **16,708 ha**, and occupies almost three communes, Dong Phuc, Quang Khe and Nam Mau

## Willingness to co-invest for pro-poor ES at catchment level (district level) is under development

**Potential co-investors**: Water companies, REDD funders, Eco-tourists to Ba Be, Governmental programs (IFAD loan for community development, Poverty reduction program, 661 forest protection and management)

**Stakeholders dialogue** to attract for ES provided by the rural poor, to develop mechanism of rewarding, Contracting and monitoring methods/approach, and (iv) In instigate the possibility of generating substantial funds through tourism by introducing user fees for service provision.


Bakun,
Benguet




## Case 2: From CES-COS to CIS
## Bakun, Philippines

# Key Actors

1. Indigenous People's Organization
2. Local Government
3. Private hydropower company

# Current Scheme

- More CES—watershed service is commoditized as 'input' to hydropower generation, where sellers are to be paid, but it has also an element of COS since the market for ES is not made open, and the Law on Share of National Wealth was applied to the scheme, with all its ambiguity.
- A CIS scheme may be achievable once tenure rights of IPs are clarified and relationship with local government is improved.

# 10 pointers for preparing and facilitating linkages (http://www.asb.cgiar.org).

PES negotiations is typically a 'boundary work'. Facilitating linkages between sellers and buyers is challenging for facilitators who are acting as 'boundary agents'.

1.Expect more complex cases of multiple actors with their associated knowledge, contesting at both Action and Knowledge levels, all using their own version of 'history' as justification; never underestimate nor over-estimate the ability of stakeholders to set their own course of actions.

2. Create open, safe space for intellectual enquiry: appreciate diversity, as long as it does not clash; refrain from value statements about other K; respect community norms and rules in use.

3.The meaning of words lies in the context of their use: don't trust that the meaning of the same words is the same for different groups. For example, 'forest'.

4. Learning will often require direct experience and empirical confirmation that alternative options do really exist: salience (‘so what’ outcomes), credibility (‘how does it work’ mechanisms) and legitimacy (‘here, now and us’ context, absence of foreign agenda)
5. Provide time for trust building: often a technical entry point can help to provide legitimacy to your engagement; willingness to listen and answer questions of local stakeholders goes a long way to establish a 2-way relationship.
6. Every facilitation/negotiation (boundary work) requires double accountability, in moral if not in formal sense; ensure backup and understanding at higher levels, as there may be times that the ‘safe space’ isn’t quite so safe. Organizations may need to ‘embed’ boundary agents in appropriate structures and provide incentives to individuals to go beyond the call of duty, exploring ways of continually improving practice, and encouraging people to listen.
7. Guard the permeability of the boundary: ‘ideas’ can flow freely, ‘control over what is true’; when ‘politically incorrect’ views or conclusions emerge, clarity is needed on the separate domains for empirical/scientific and public/domain knowledge

8. Knowledge sharing may aim not for maximum clarity (the researchers' aim) but *optimal ambiguity or straddling between that:* multiple K level interpretations can co-exist, as long as they do not clash at the A level.

9. Live & walk the talk about separating scientific K from influencing conclusions, e.g., "although I personally had hoped otherwise, the outcome of the analysis/experiment is..." Ensure that content/substance and process of engagement are compatible and maintained.

10. Explore jointly how K⇔A linkages may have co- evolved, once there is awareness and appreciation of the relativity of all knowledge systems; Note that process is as much important as the technical content/substance of the boundary work. Build a matrix for measuring program success.

# More challenges

- Paradigms for enhancing environmental services may have to focus on green infrastructure and assets rather than current flow of services.
- How can social norms rewards be blended with monetary payments for long term sustainagility—will behavioral economics apply?

# Acknowledgement/Credits

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