



Can REDD payment alone protect the forest?

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BACKGROUND

Data suggests that Asia has made a net increase in forest area – largely due to the reported increase for China – but still contains the country with the largest net emission (Indonesia).

Vietnam can be seen as a ‘nutshell’ of this situation, with parts of the country that resemble Indonesia’s net deforestation pattern, and parts that resemble China’s net increase in forest area (and reduction in forests carbon-stock).

Vietnam was one of the first countries to turn the corner on ‘forest transition’ without having first completely depleted the forest. However, while reported forest area increased, net emissions continued to rise as carbon-rich forest was lost and plantations of low carbon-stock were added.

Current REDD+ activities in Vietnam mainly focus on Reference Emission Level; Monitoring, Reporting and Verification; Benefit Distribution System and capacity building.

QUESTIONS

- Can REDD payment alone can protect the forest?
- How to sustain funding for REDD? A viable incentive system (VIS) needs to be developed as one of the most essential aspects for a successful REDD payment negotiation, for both the formal and voluntary carbon market (figure 1).

Initial findings of the Reducing Emission from All Land Uses (REALU) project in Vietnam related to VIS development area presented in this poster.

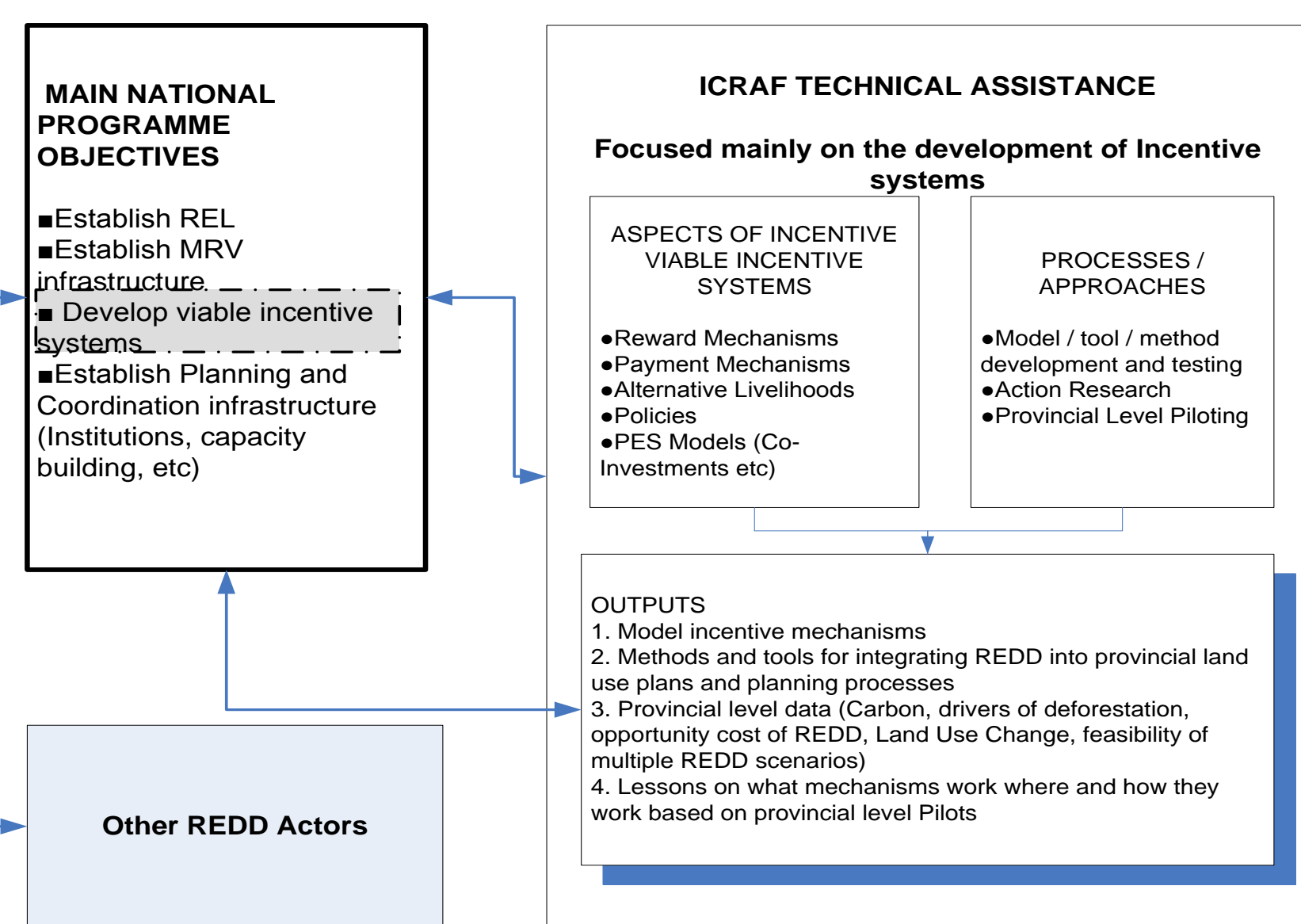
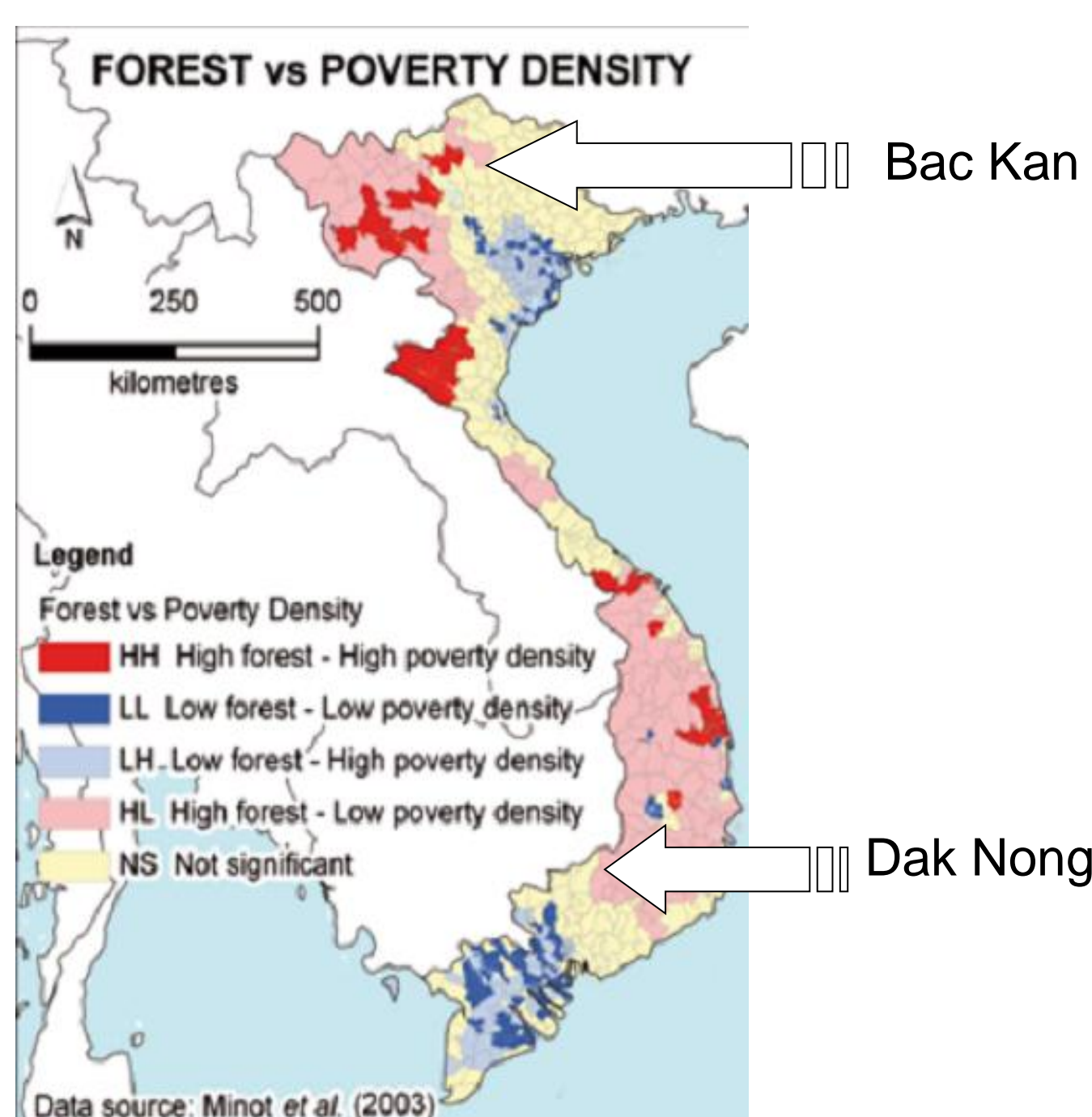


Figure 1. VIS contains reward, payment, livelihood options, ‘bundling payment for environmental services’ or ‘co-investment for PES’

RESEARCH PROCESS AND ACTIVITIES

This research has been carried out since 2008 in Dak Nong and Bac Kan provinces (map 1).



The process of VIS includes (1) mainstreaming REDD objectives into cross-sector land-use planning to address land conversion from forest to other land uses; (2) development of effective governance approaches; and (3) link in the governance approach with performance using Payments/Reward for Environmental Services (PES/RES) as shown in figure 2.

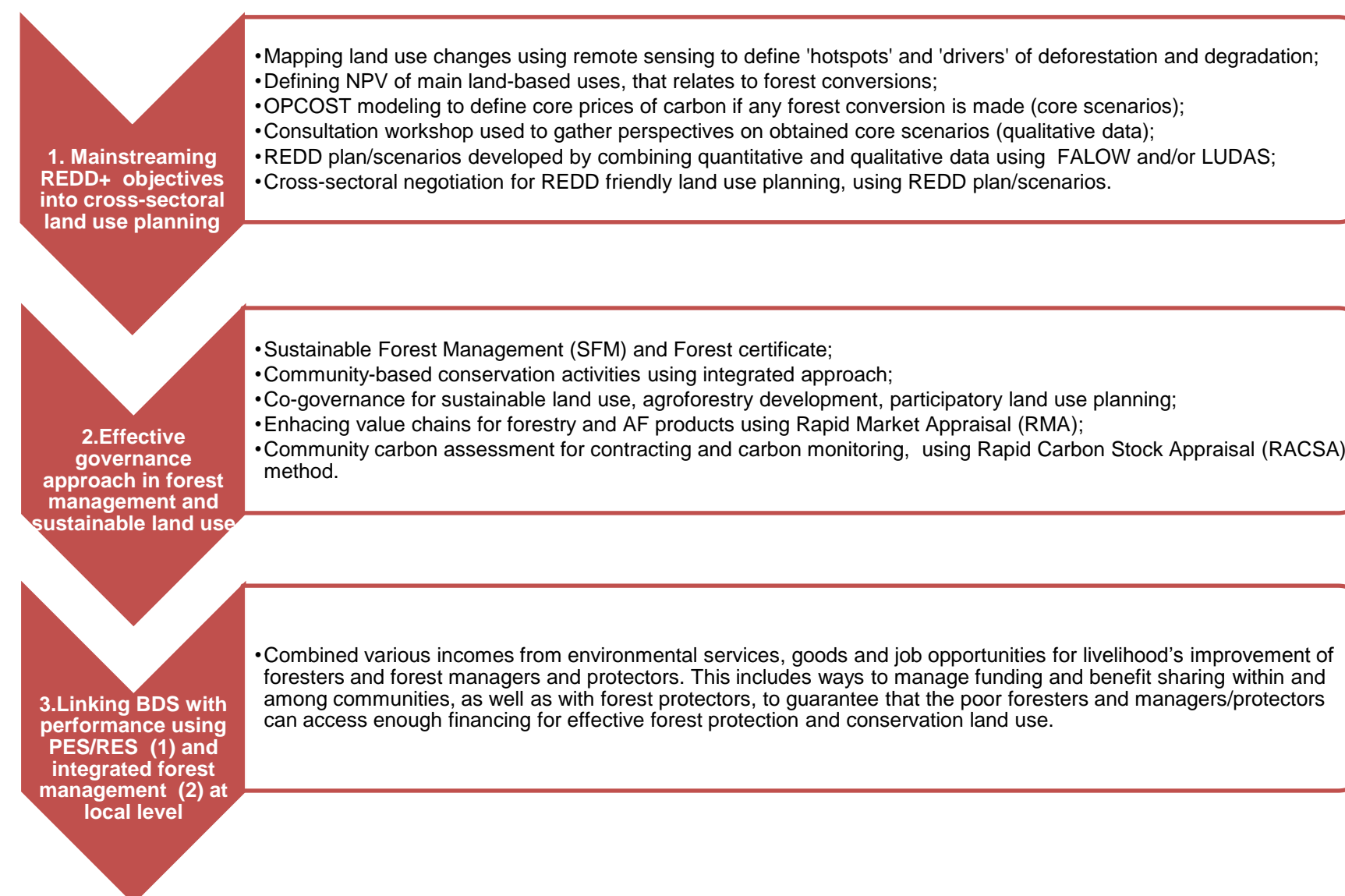


Figure 2. Three steps of a VIS for REDD/REDD+

During 2009-2010, the main objective was to test methods needed for steps (1) of the VIS process.

- The land use classification of Dak Nong province was adjusted to fit with that of the opportunity cost model (OPCOST).
- Remote sensing (Landsat and Spot 5 imagery) and GIS analysis were used to illustrate the land-use change trends over 30 years (1979-2008).
- The land-use change matrix, together with Net Present Values (NPV) of the main land uses were used as inputs for OPCOST.
- Review and stakeholders ‘workshops were used to define the main land-use change trends, their causes and impacts.
- Two national workshops were organized to feedback the findings and develop recommendations for scaling up the tested methods and process in other provinces.

FINDING AND DISCUSSION

Cross-sector land-use planning

In Vietnam, cross-sector land-use planning (LUP) at provincial level is the legal basis for making decisions on land-use change, including converting forests into other land uses. The review of Dak Nong LUP showed big gaps between planned and real land-use change (table 1).

Table 1. Inconsistencies between land use planning and its implementation in Dak Nong province.

Land use type	REALU changes 2006–2008	Planned LU changes 2006–2008
Shifting cultivation		6014
Industrial perennial crops		-1535
Natural production forest		-6141
Natural protection forest		-1289
Planted production forest		-6387
Planted protection forest		-50 911
		0.00
Land for forest plantation and regeneration		7125
		6787
		-2488
		0.00
		1944
		0.00

To provide the best possible choice for different land uses and to consider the trade-offs that a decision will bring, a sound scientific base on land-use change trends, causes and their potential impacts on the different benefits is necessary. In this context, opportunity cost analysis provides a good tool for trade-off and negotiations.

Carbon off-set price

The Land-use change matrix shows that the largest land use conversions in Dak Nong were forest to industrial crops, rich forest to poor forest, and forest plantation (Figure 3)

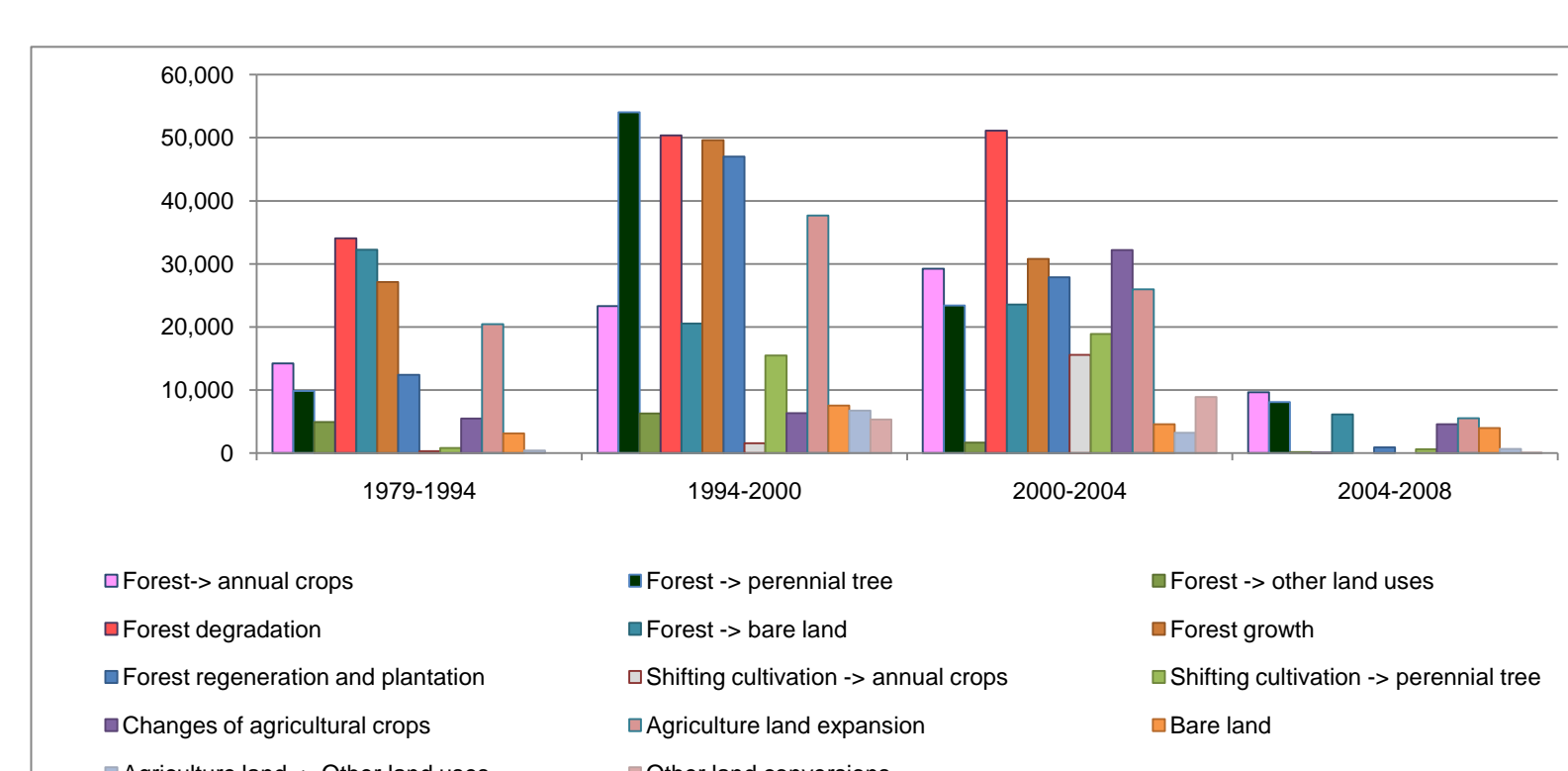
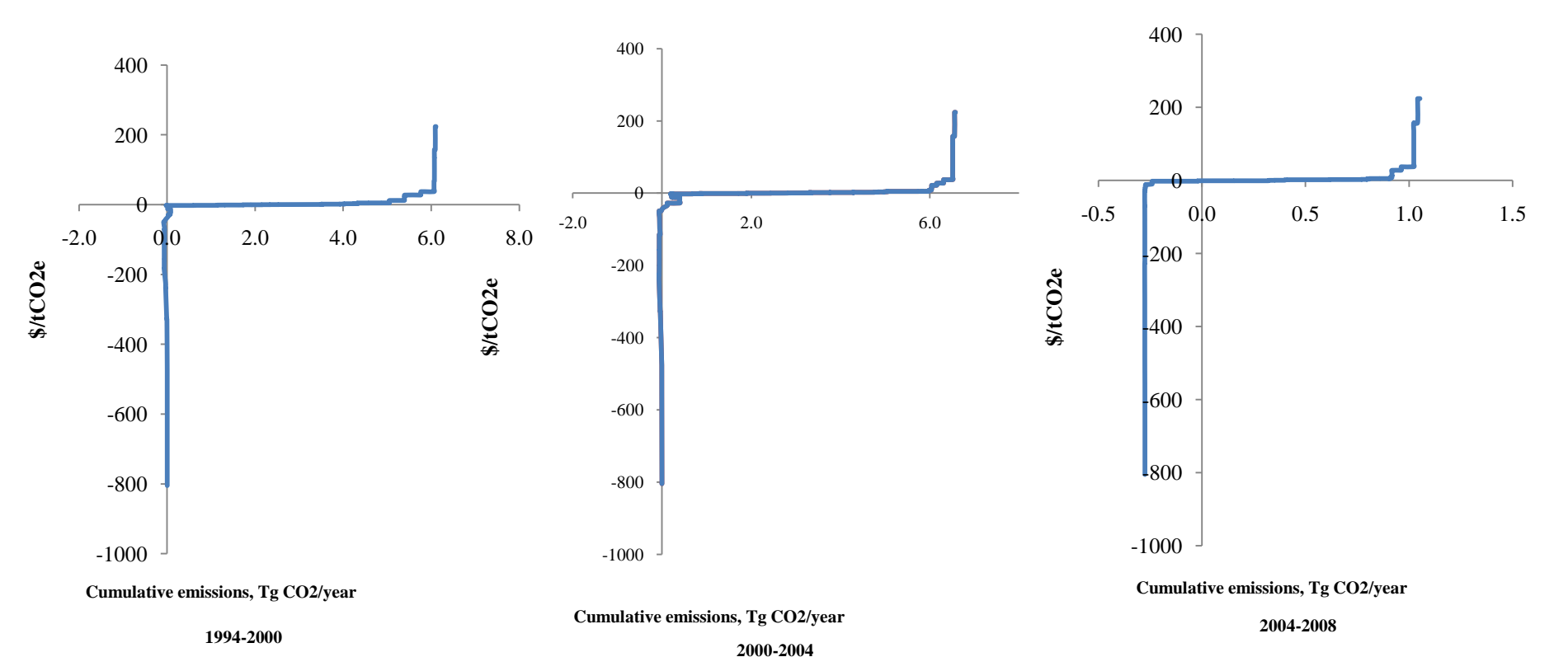


Figure 3. Land-use change matrix (1979-2008) in Dak Nong.

A large amount of land-use change generated between USD 0 and 5.30 per t CO₂-eq lost (Figure 4)



This was either conversion of natural forest and planted forest to low carbon annual crops, and some perennial crops like cashew and pepper, or conversion of medium forest to poor forest and young forest/re-growth.

Theoretically, these emissions could have been prevented if a carbon market was in place. On the other hand, deforestation due to conversion from natural forest to coffee and rubber plantations resulted in the highest carbon abatement cost – up to USD 224.10 per CO₂-eq lost when poor forest was converted to rubber plantation – owing to the very high economic benefit of these two crops.

This means the current carbon price will not be able to stop deforestation for rubber and coffee plantations in the area. The implication is that local context and condition should be taken into consideration, together with Opportunity Cost Analysis, in order to define reasonable carbon off-set price.

A bundle of payments/rewards will more effectively enhance forest carbon-stocks, livelihoods of local people and co-benefits

Forests cannot be successfully protected using a forestry approach alone and cannot be separated from the broader landscape because ‘drivers’, ‘actors’, and ‘incentives’ interact and overlap. A broad-based approach to carbon management can lead to greater emission reduction and benefits for local people. For obtaining a Fair, Effective and Efficient REDD+, bundling PES, livelihood options and REDD payments is under development in Bac Kan province (figure 5).

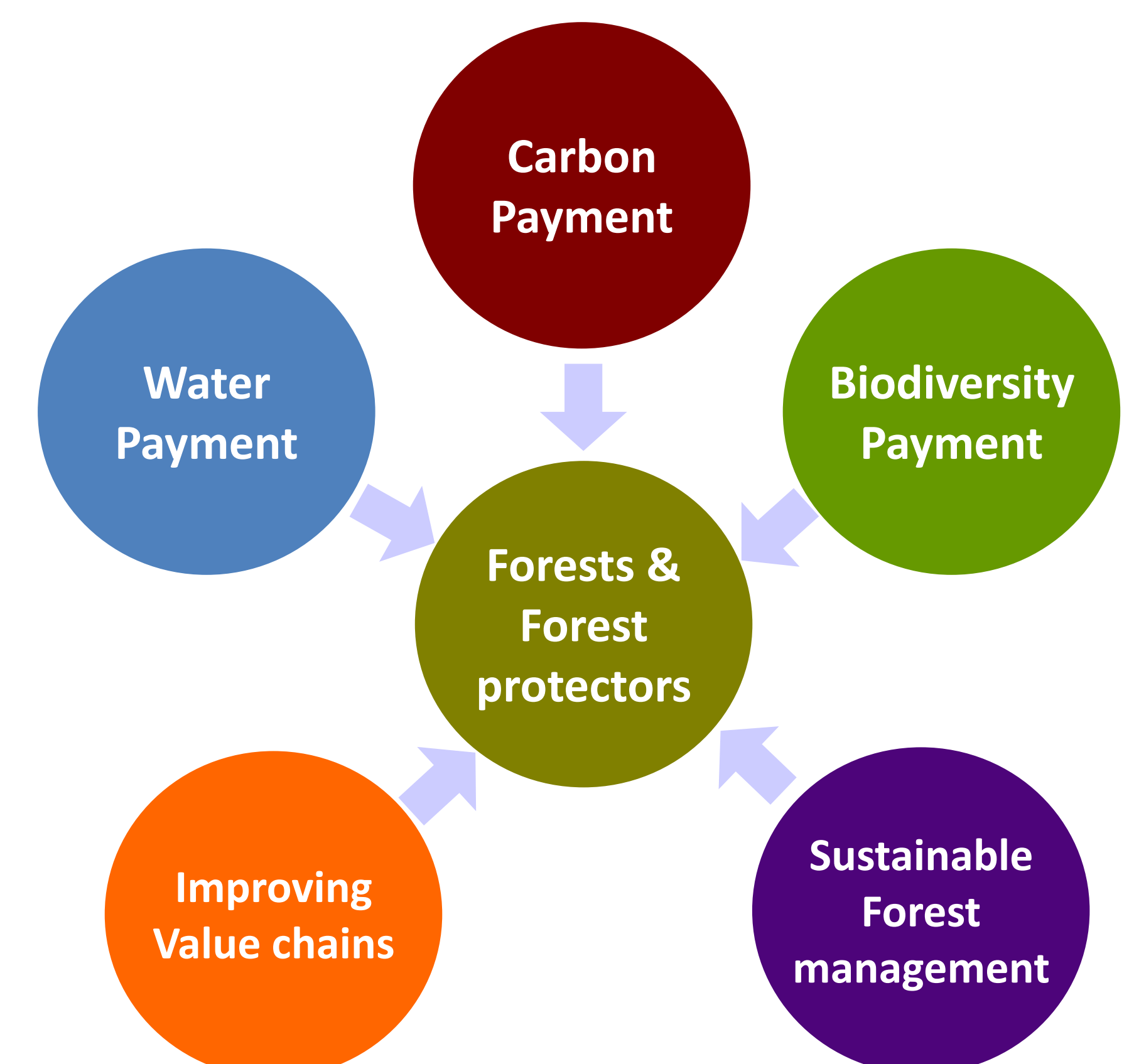


Figure 5. A Bundle of payments for forest protection.