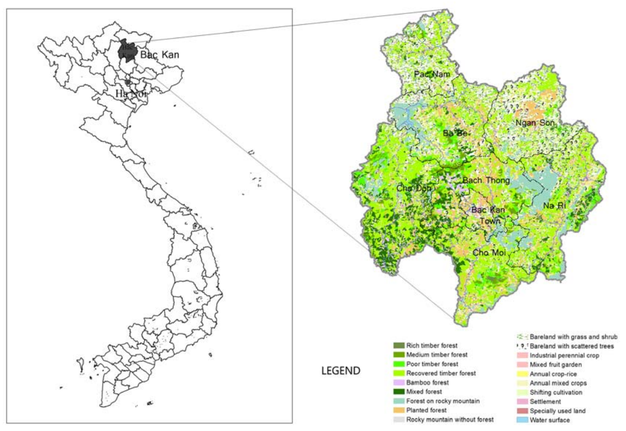
Can a REALU mechanism change the course of tree cover change in Bac Kan province?

Country: Vietnam
Continent: Asia
Annual rainfall: 1600mm
Average temperature: 22°C

THE LANDSCAPE



Landscape features	Bac Kan	Vietnam
Total land area (ha)	~ 486,000	~ 33,000,000
Population density (people /sq. km)	61	280
Forest cover (%)	56.6	39.1
Poverty rate (% of households)	37.0	13.4
Ethnicity (% of ethnic minorities)	86.7	13
Contr. of Agric & Forest. to GDP (%)	41.08	21.60

ISSUES

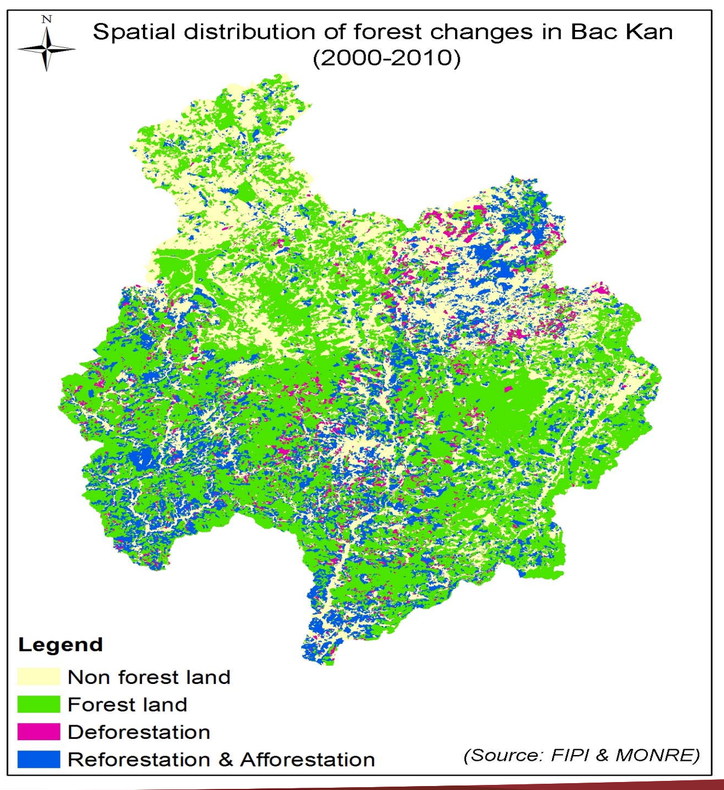
- Conflict between local livelihoods and top-down forest conservation
- Unsustainable land use practices such as shifting cultivation
- Unclear forest land tenure

RESEARCH QUESTIONS

Can a REDD+ or REALU (Reducing emissions from all land uses) mechanism help in reducing conflict between economic development and forest conservation in Bac Kan province?

KEY FINDINGS

Forest changes in Bac Kan (2000-2010

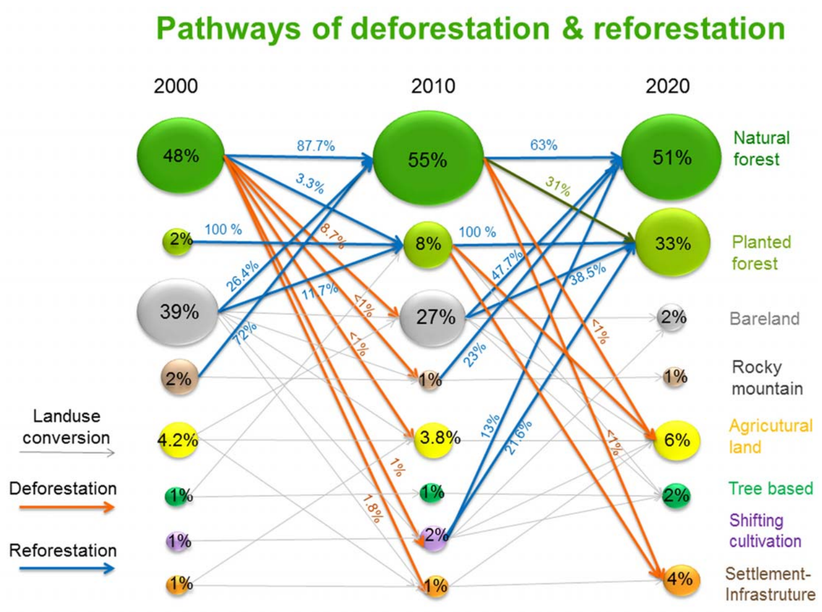


Deforestation

- Total deforested area: **22,259.4 ha**
- Conversion of forest into bare land with scattered trees accounted for 94.3% of total deforested area
- Drivers: Illegal logging, legal concessions, natural deforestation, conversion of natural forest to planted forest, timber demand
- Actors: Households, traders, timber companies

Reforestation

- Total reforested area: **82,628.9 ha**
- Conversion of bare land/non-forest into natural and planted forest accounted for 100% of total reforested area
- Drivers: land use zoning, reforestation program (661,147) and natural forest re-growth
- Actors: Government, Provincial/District/Commune People's Committees, households



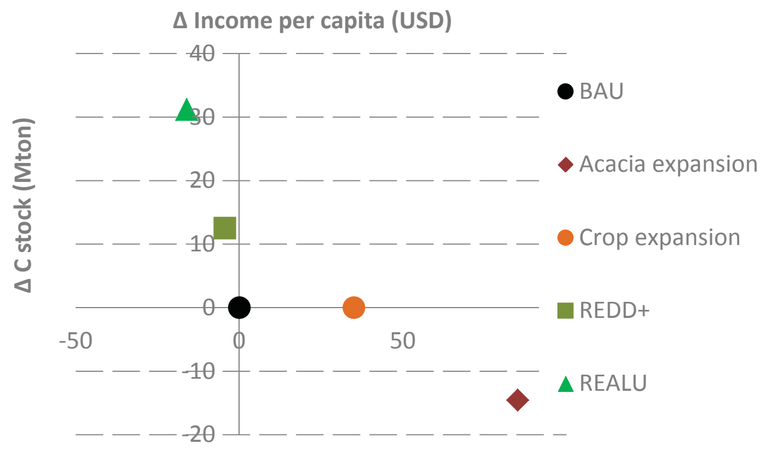
Land use scenarios in the next 30 years

We used the 'Forest, Agroforest, Low-value Lands Or Waste?)' (FALLOW) model to help local land use planners in designing 'greener' land use strategies.

Scenarios

- Business as Usual (BAU)- free competition of all land uses based on economic profit
- Acacia forest expansion-- subsidy is given to smallholders for establishing forest plantation
- Crop expansion--subsidy is given to smallholders' for annual crop production
- REDD+-- bare lands of protection and special-used forest will be planted with forest tree species while illegal logging will be completely stopped
- REDD ++ or REALU-- REDD+ and upland mono-cropping will be replaced by agroforestry systems

Trade-off analysis between scenarios



- Both REDD+ and REALU scenarios produce higher C- stocks but the economic benefit reduced slightly (4USD/capita and 1 USD/capita, respectively).
- Acacia expansion increased the income per capita accompanied with a significant loss in C-stocks.
- Crop expansion has very small added value to landscape C-stocks and moderate economic benefit compared to BAU and Acacia expansion.
- Therefore, REALU is the better scenario in terms of landscape C-stocks, but it will only be feasible if an incentive mechanism is in place to compensate for income loss.

CONCLUSION

- REALU is a better option if payments offered by the global REDD market are added to the incentives already proposed.
- However, the province' target of 84% forest cover and 6% agricultural land by 2020 suggests that significant economic tradeoffs may make local people poorer than they currently are.
- The sustainability of a REALU mechanism is faced with uncertainty, not only in terms of sustained financing, but also in terms of addressing widening economic tradeoffs and not further harming the poor.
- We therefore proposed the elements of a sustainable and adaptable REALU mechanism: (i) bundling environmental services and payments; (ii) linking the mechanism with rural development support programs; (iii) national guidance and support for building the capacity of local implementers; and (iv) removing national legal/regulatory and technical barriers.
- Finally, integrating in mainstream national and rural development strategies with a clear focus on 'emissions reduction' may make a REALU mechanism not only feasible but also sustainable..

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REALU
Reducing Emissions from All Land Uses

Partnership for the Tropical Forest Margins
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