

Enhancing the Sustainability of the Infrastructure Planning Cycle

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Contributions of Spatial Analysis

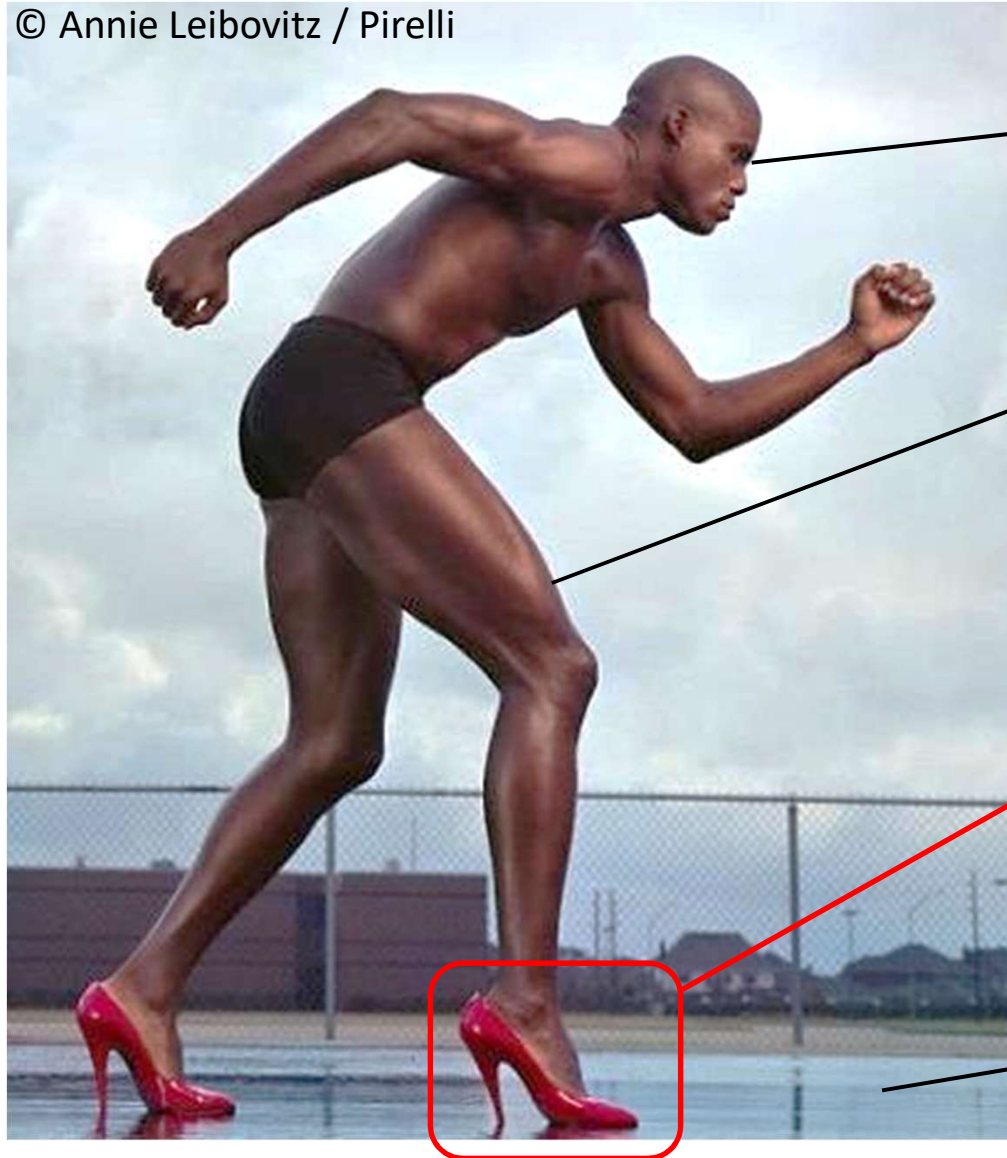
Session:

**Implementing an Integrated Approach
to Infrastructure**

Dilemma:

“Power is nothing without control”

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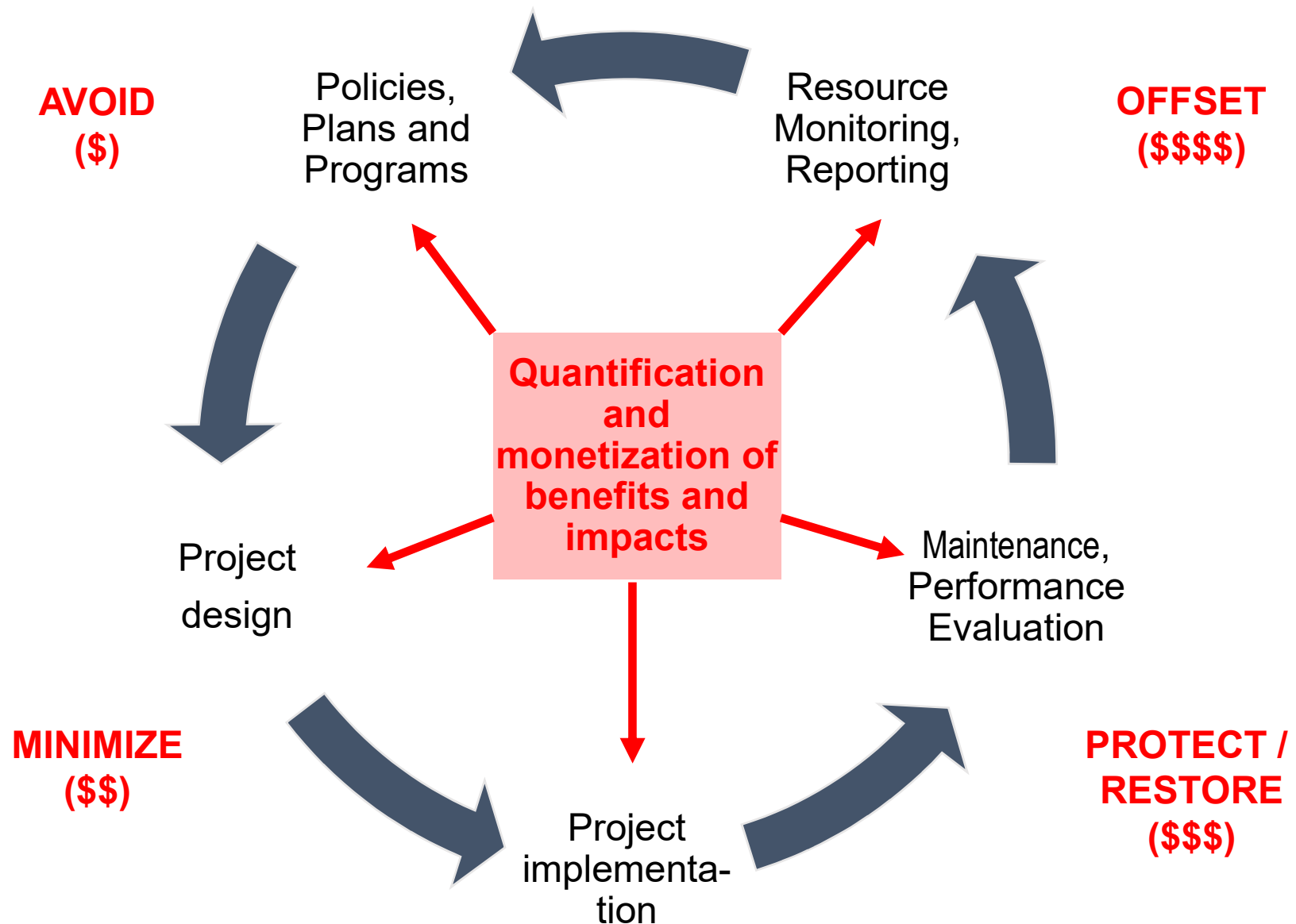
Development Goals
and objectives

Finances

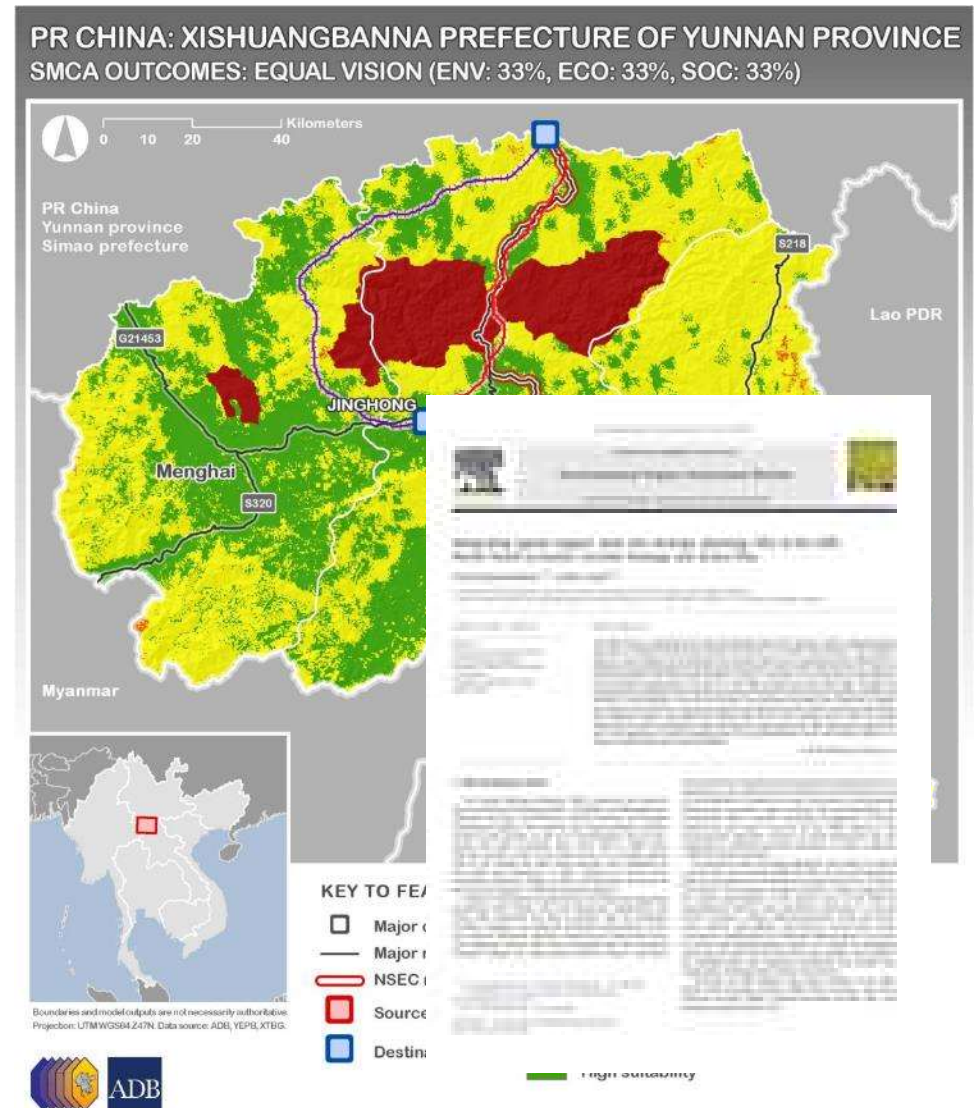
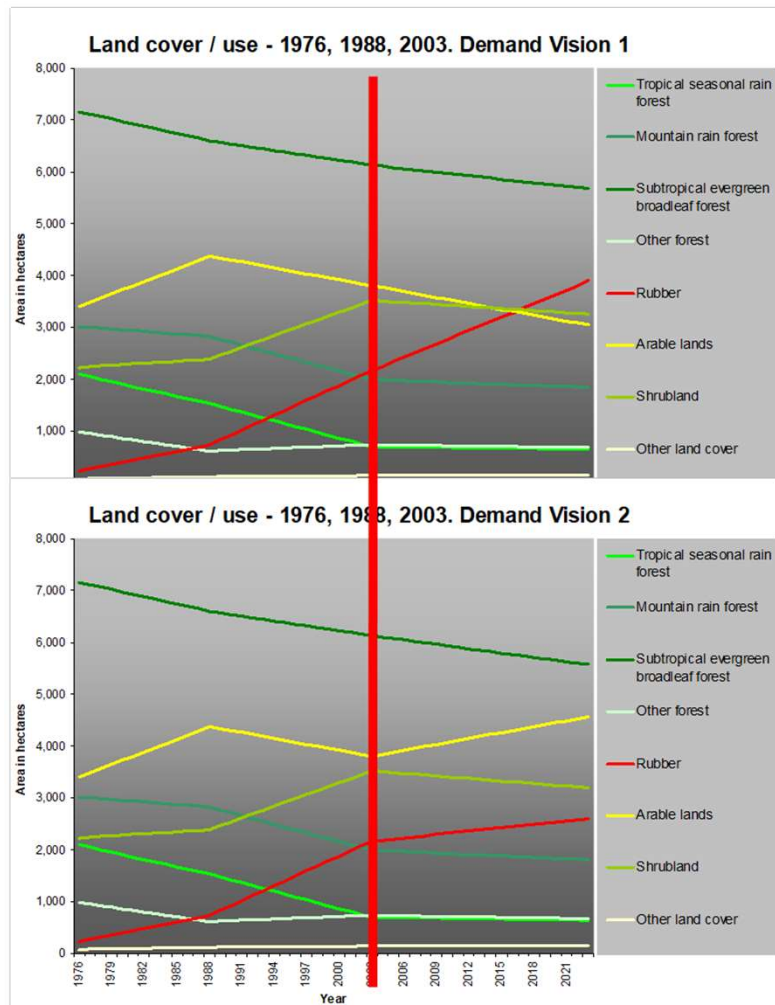
Sound assessment
of costs and benefits

Investment

The (Infrastructure) Planning Cycle: Broadening the perspective

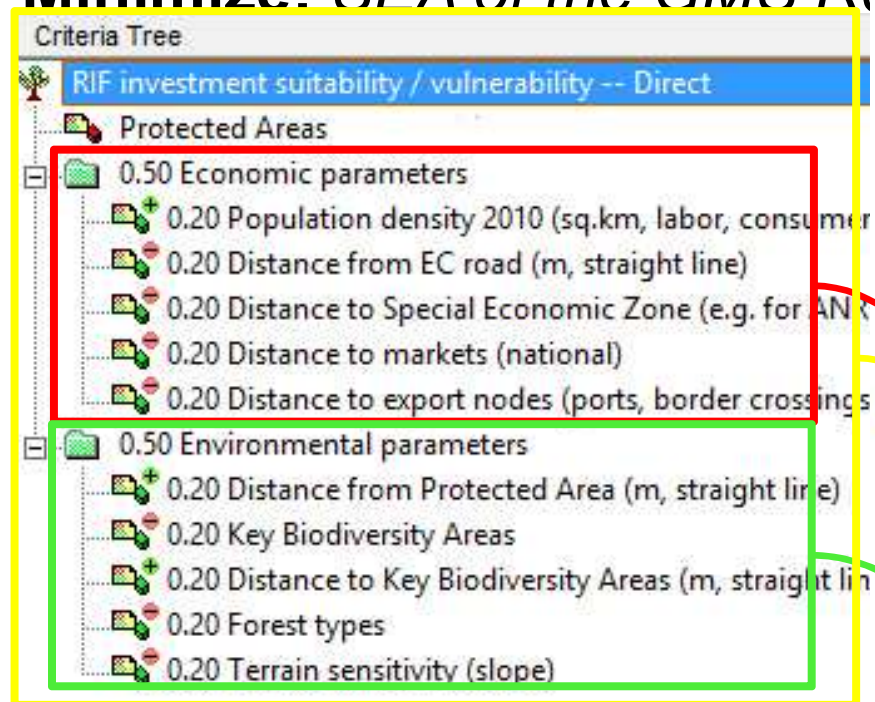


Avoid: *SEA of the North South Economic Corridor Strategy and Action Plan*, used Land Use Change Simulation and SMCE preview road impact (land use change) and sustainable railway alignment options.



Minimize: SFA of the GMS R

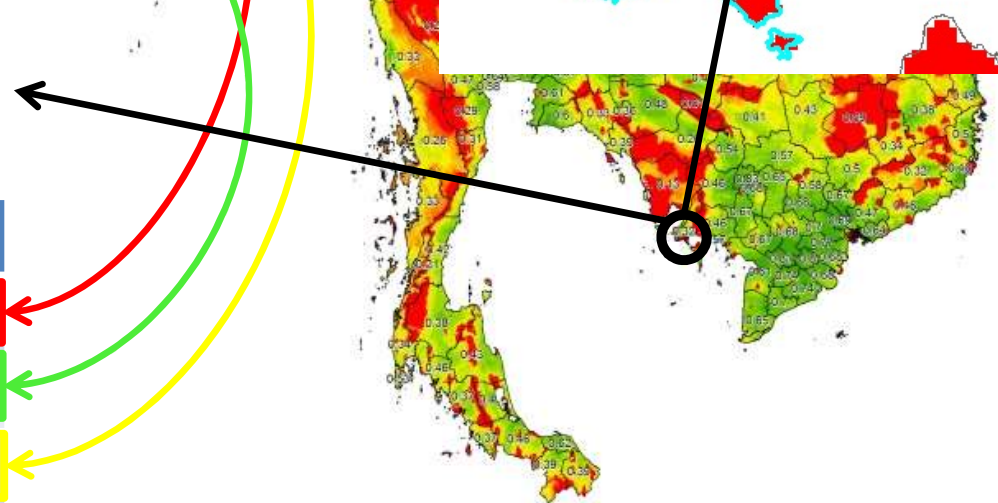
Suitability and risk values at 1km resolution across GMS



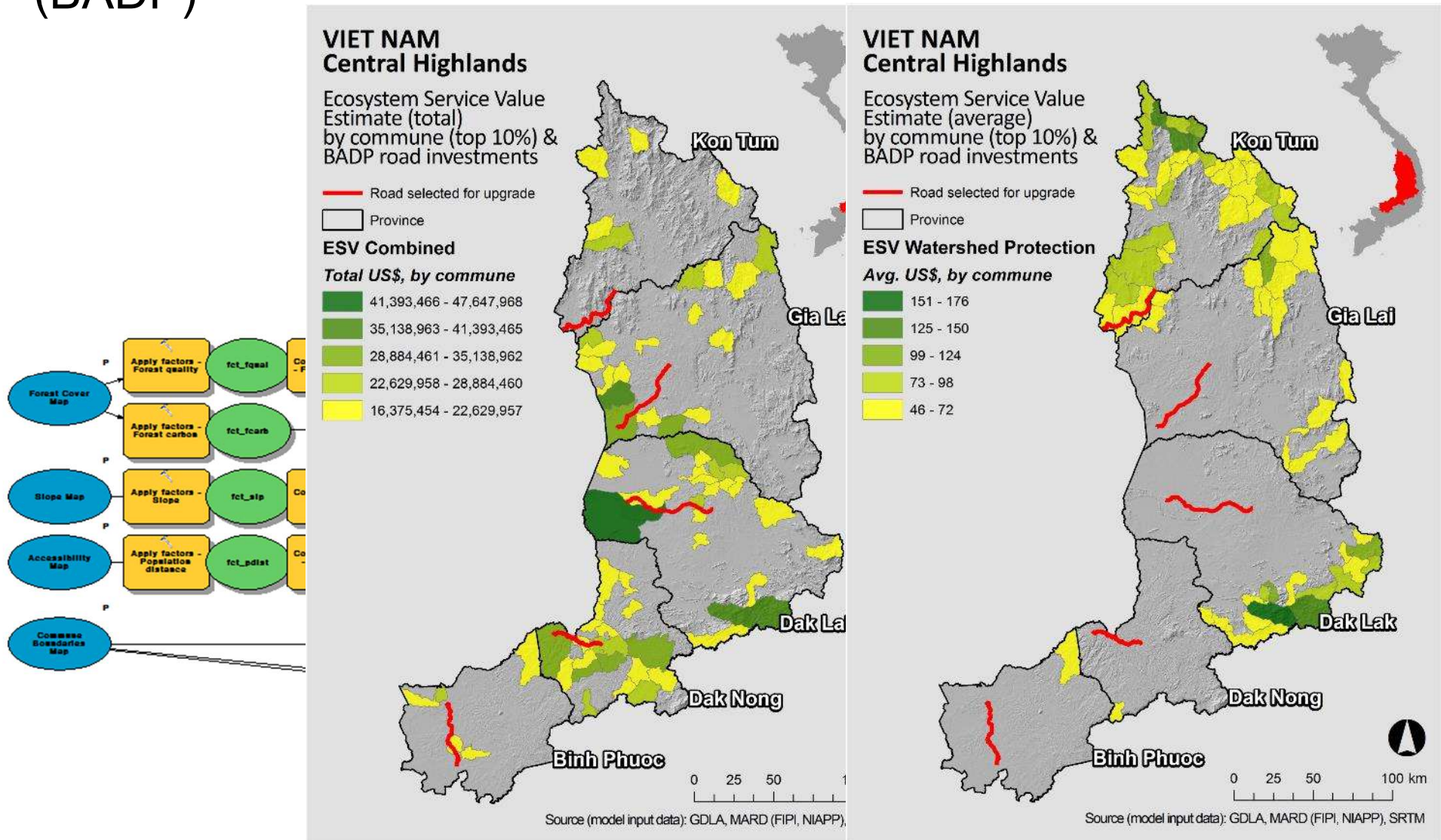
Sihanoukville Port Access Road Improvement Project (Sihanoukville Province):

	Min	Max	Mean
Eco	0.1	0.8	0.44
Env	0	1.0	0.4
Total	0	0.8	0.31*

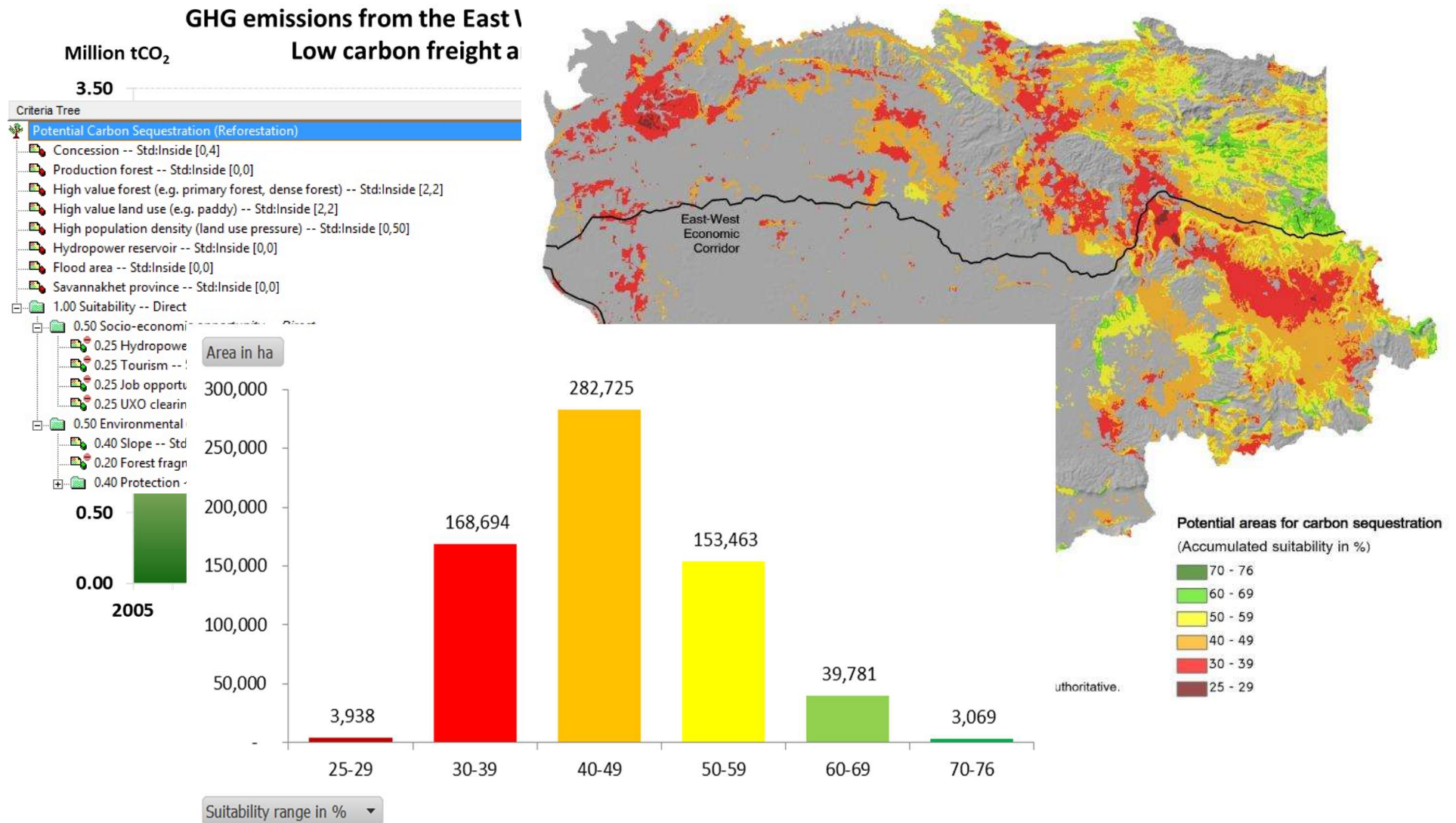
*lower than eco and env because protected areas are set 0 on a level above



Protect/Restore example: *Investing in Natural Capital & Sustainable Transport in Viet Nam*, used mapping and monetization of ecosystem services for investment design (BADP)



Offset example: *GMS Green Freight Project*, used SMCE to identify areas for carbon sequestration to offset GHG emissions from growing freight traffic along EWEC



Lessons learnt, recommendations

1. Understand hard and soft constraints (politics, agendas, culture etc.), have strategies in place to deal with them
2. Target the right plan and people
3. Timing is key
4. Adopt a “partner” rather than an “enforcer” attitude
5. Spatial analysis enhances the credibility of the planning process and its results
6. Align pace of innovation to absorption capacity
7. Analysis should work under given conditions
8. Always provide viable alternatives and solutions if you recommend against government priorities!
9. Promote accountability (Who’s responsible? For what?)
10. Spatial Data Infrastructure is weak but still has enough potential to demonstrate value of SA/ISP

Thank you!