

# Vulnerability Assessment and Scenario-based Approaches for Future Effects of Global Changes on Conservation Areas in the Greater Mekong Region

Anond Snidvongs

Southeast Asia START Regional Center  
Chulalongkorn University  
Bangkok, Thailand

# Why Scenario?

- Global climate change (GHG driven) is slow but gradual and it may take up to a few decades (though some areas may take much shorter time) for the ‘physical’ effects to be clearly seen,
- Local drivers (physical, economic and social) may proceed in much faster rate and more uncertain,
- Systems are highly interlinked among internal and external factors at which climate (and other global drivers) has different influence upon.

# What Scenario?

- Time scale 20-30 years (2030-2040)
- More than 1 alternated scenarios, preferably 2-3, such as:
  - most optimistic (greenest?) vs most pessimistic (brownest?)
  - ecological focus vs industrial focus

# Considerations for Visioning/ Foresighting

---

- Area management scheme/governance
- Human and society: *capacity, awareness, livelihood, ecosystem dependency, etc.*
- Organization/networking: within and between systems, sectors and individuals
- Financial/funding/investment opportunities
- Infrastructures and mega projects: *roads, dams, dykes, power generations, new urban centers, etc.*
- Overall picture of the landscape

# 2-D Scenario Development

What are the most important drivers for change of each area?

- *IPCC SRES: Geographical fragmentation (globalization/regionalization) and development focus (economic/environment)*
- *Thailand SNC: Economic goal (export/self sufficient) and social development focus (centralized/distributed)*



# More Considerations

- Not necessary to be ‘quantitative’, in fact ‘qualitative’ scenarios that conceptualize how factors and drivers are linked/interlinked are more useful,
- Future climate (and other global) variables will amplify or reduce internal and external factors in different ways