Developing Recommendations for Climate Change Adaptation in Priority Biodiversity Conservation Areas in the Greater Mekong Region

A workshop convened by WWF GMP, CARE / Raks Thai, and SEA START RC with support from The MacArthur Foundation, Raks Thai, and Sida /SENSA

17-18 June 2010

Holiday Inn Silom, Bangkok

Outline

- Workshop purpose and rationale
- Workshop structure, agenda, group work, and outputs
- Summary of key outputs from last year's workshop

"Solutions to the problems of climate change should be sought within the framework of sustainable development in an integrated, coordinated and mutually reinforced manner."

Dr Thongloun Sisoulith,
Lao PDR Deputy Prime Minister
& Minister of Foreign Affairs
UN meeting New York

Purpose

Reach consensus on key issues that must be addressed to mainstream climate change adaptation and key strategies that can effectively build climate change resilience in the 6 priority areas

- WWF and the co-conveners do not intend to be prescriptive. On the contrary, our purpose is to play a supporting role and help the governments in the region confront the challenges climate change poses.
- This workshop is one contribution to the process of understanding and responding to climate change – many initiatives in region

Expected Outcomes and Outputs

- Consensus on key issues that must be addressed to mainstream climate change adaptation and key strategies that can build climate change resilience
- A declaration on good adaptation practice, key issues, and strategies to address them
- Partnerships to develop examples that demonstrate synergies between ecosystem- and community-based approaches to adaptation
- Overview of the status of projects and initiatives related to climate change adaptation in the 6 priority areas
- A synthesis report
- An agreed mechanism to continue dialog

Why WWF, Raks Thai, & START?

- Emphasize links between ecosystems and human wellbeing
- Different emphases have emerged in policy dialog: CBA / EBA / etc.
- EBA: management, protection and restoration of ecosystems to provide resilience to climate change impacts *for* people and ecosystems.
- Seek synergies between EBA and CBA
- Speaking to decision makers and other stakeholders in region with a unified message will lead to better outcomes for people and biodiversity

Assumptions

- Selected landscapes are biodiversity conservation priorities, but not 100% protected
- Participants have specific knowledge / experience in the 6 priority areas or relevant expertise or interest that will allow substantial contributions
- CC resilient landscapes require landscape integrity / better land use planning / mainstreaming of climate change considerations into development plans
- Large, well connected, biologically diverse ecosystems provide CC resilience and help reduce disaster risks
- Building capacity of communities to cope with CC impacts should benefit ecosystems and vice-versa

Resilience

Resilience – the ability of a natural or human system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.

Example: Resilient freshwater ecosystems:

•Are **minimally affected by non-climate pressures** that reduce the capacity of the ecosystem to respond to climate change-related pressures and shocks.

•Are already subjected / **adapted to significant natural variability** and have **intact disturbance regimes** that help maintain ecosystem structure and function.

•**Contain refugia,** which are areas buffered from major changes in climate.

•**Are well connected** to facilitate species movements throughout the ecosystem and amongst habitats

Agenda

Workshop Structure and Group Work

- **Activity 1:** Review outputs from last year's workshop; update key landscape / CC resilience features, as well as gaps and adaptation strategies from last year's workshop
- **Activity** 2. Stock take of initiatives in the priority areas that relate to climate change adaptation
- **Activity 3:** Evaluation of landscape configuration
- **Activity 4:** Develop ways forward on climate change adaptation in the priority areas: identifying top issues, strategies to address them, and their feasibility

Activity 1 Results

Update of Outputs from Last Year's Workshop

Classification of Gaps & Barriers Impeding Resilience

Awareness	Knowledge	Technical	Financial	Institutional
Are we aware of what is going to happen in the landscape? Is there agreement from different actors/ sectors on the changes expected? Are all actors equally aware of the issues? Are the actors aware of the big picture as well as their own specific sectoral focus?	Do we have data, information and understanding of the issues? Is their due consideration of appropriate time scales?	Is there sufficient and appropriate technical capacity? What are the technical gaps?	Are there sufficient financial resources? Are these allocated to the right recipients? Is the scale of funding sufficient to meet the need and address the problem?	Who are the institutional actors in the landscape and any their any gaps? Is their overlap/conflict between different institutional actors? Does the policy framework support or deter adaptation? Are coordination mechanisms in place and effective? Is there an effective conflict resolution mechanism? Are their feedback mechanism to learn from experience?

Activity 2 Results

Projects in Landscapes and Impacts on Resilience

Projects	CC in design?	Positive impact	Negative impact
List of the projects and plans for each landscape, both ongoing projects and also planned projects for the landscape (Including location, implementer, duration, approaches)	Was CC considered in the design	What are the positive CC consequences of the project e.g. native species tree plantation scheme contributes to restoration of an upland denuded watershed.	What are the negative CC consequences of the project e.g. exotic species plantation scheme will replace natural degraded forest in a key habitat corridor.

Activity 3 Results

Map showing features that build / affect resilience

Key issues and their impacts on resilience

Issues	Impact
Institutional, Governance, Capacity, Policy, Social networks.. Issues that are influencing social resilience, eg: education, training programmes? Migration into or out form the landscape, a trend that is not part of a government programme?	e.g. increases the capacity of women to understand how CC influences their household Spontaneous migrants are squatting on land along the river bank leading to loss of wetlands services increasing flood risk

Activity 4 Results

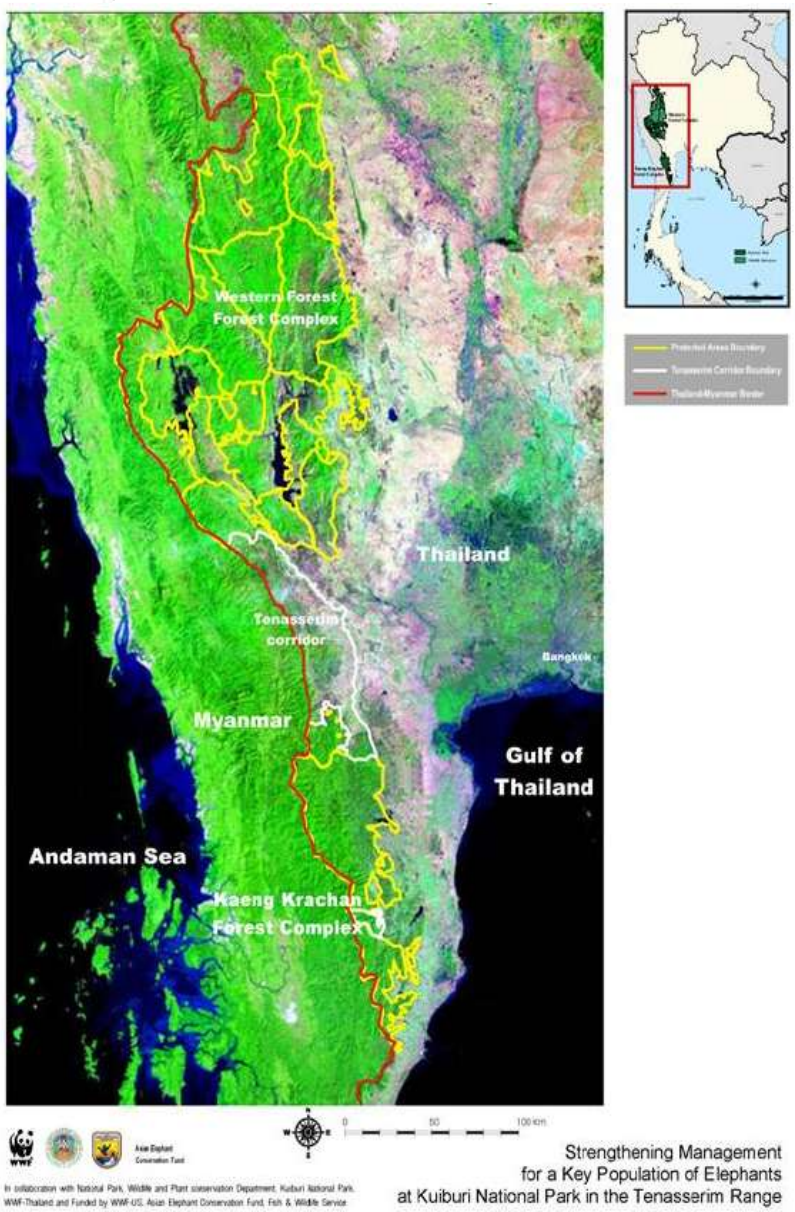
Ways forward on climate change adaptation in the priority areas

What are the top issues in each landscape?	What are the proposed strategies
Based on activity 3, consider which should be prioritized What are the key problems you would address to maximize landscape resilience?	Of the strategies proposed / current projects, which would you recommend? Consider feasibility, enabling environment (policy, institiional mechanisms, partnerships, resources, …)

Summary of Last Year's Workshop

- Purpose last year: develop preliminary strategies to maintain the resilience of the region to combined effects of climate change & other environmental changes.
- Process for each priority landscape
  1. Identify core values pertaining to biodiversity conservation.
  2. Identify major changes from development in each area and their likely effects.
  3. Identify species, habitats, and ecosystem services likely to be sensitive to the combined effects of climate change and other stresses elucidated in session 2.
  4. Develop general adaptation options / strategies.
  5. Throughout steps 1-4, identify gaps

Adaptation Strategies & Gaps: WEFC/KKFC



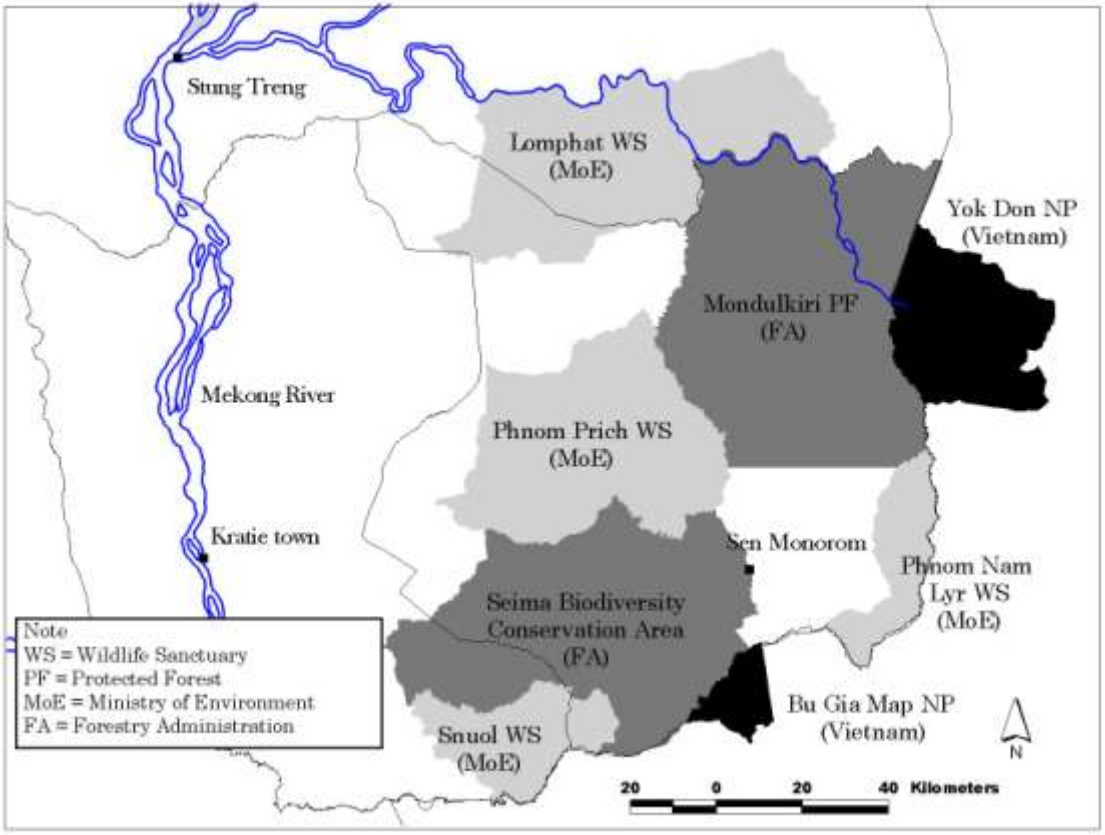
Strategies

- Integrated development planning
- Ensure national CC committee links to landscapes
- Involve local communities in routinely collecting information about their surroundings (e.g. species abundance, climate variables)

Gaps

- Need to convey research results back to communities
- Identify areas / communities with the highest risk
- Identify key species that can be used for climate change monitoring

Adaptation Strategies & Gaps: Dry Forests



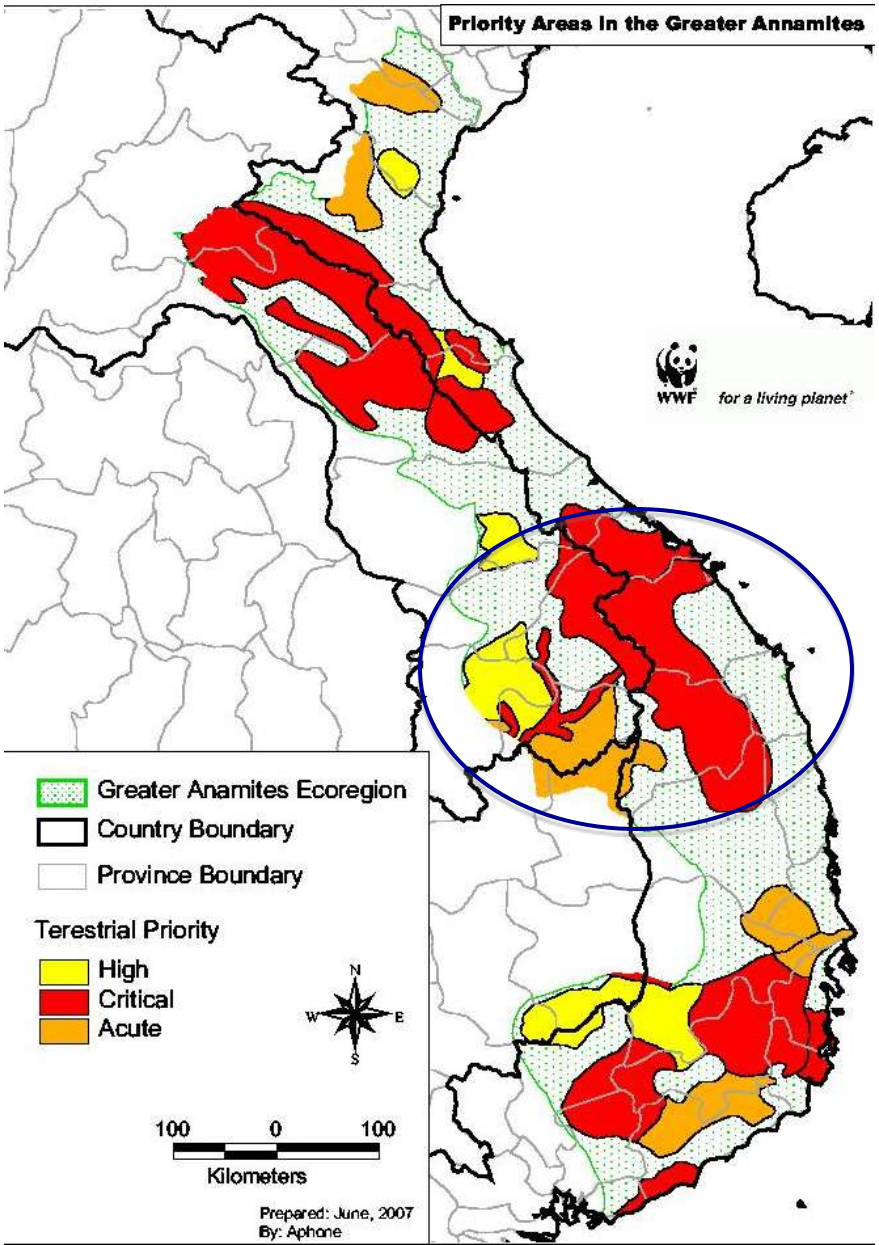
Adaptation Strategies

- Assess whether current protected area system has adequate resilience to CC impacts
- Create community awareness of climate change and adaptation measures

Gaps

- Understand the ecological role of seasonal ponds for wildlife
- Understand CC impacts on seasonal ponds

Adaptation Strategies & Gaps: Annamites



Adaptation Strategies

- Enhance protected areas for forests, wetlands & lagoons
- Restoration and reforestation
- REDD and REDD+
- Joint monitoring for REDD, invasive species, forest fires, trans-boundary trade, and climate change indicator species

Gaps

- Understand Annamites' ecology, and the inherent adaptive capacity of its species and habitats
- Understand species migration as a function of temperature and rainfall changes

Adaptation Strategies & Gaps: Siphandone

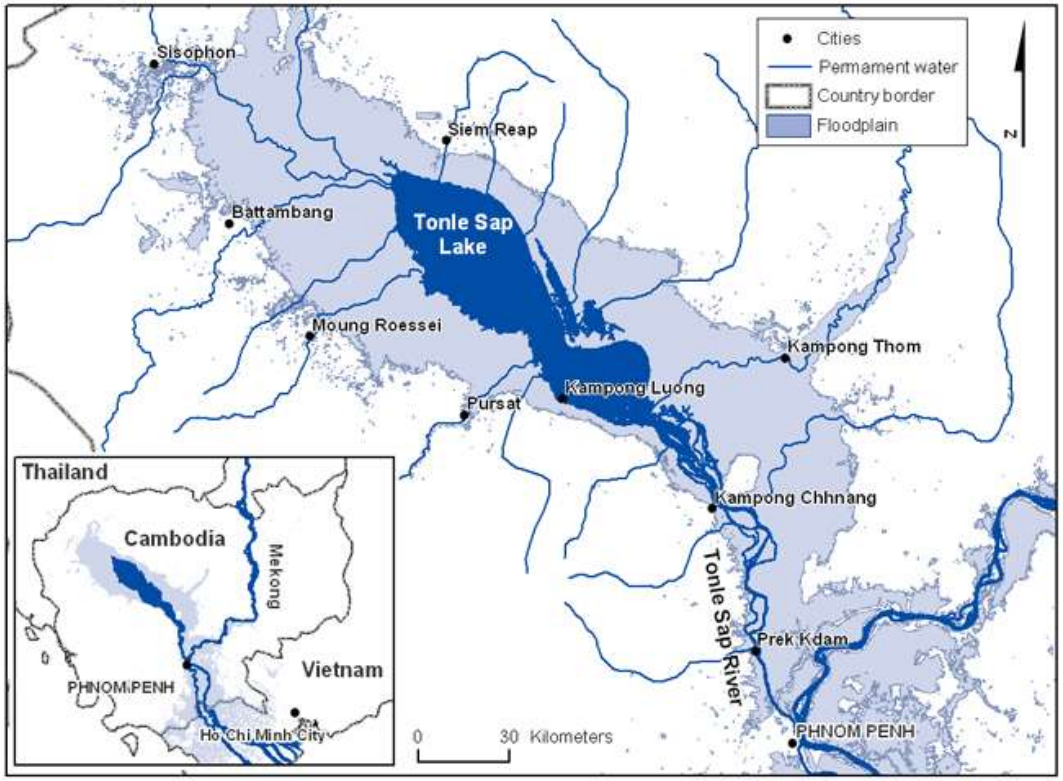
Adaptation Strategies

- Move from centralized to an area-based integrated planning and management approach
- Create a disaster management committee
- Maximize the environmental services provided by wetlands
- Develop sustainable ecotourism as an alternative form of livelihoods

Gaps

- Understand sensitivity of fish species to changes in temperature and flow
- Identify spawning areas and timing of breeding

Adaptation Strategies & Gaps: Tonle Sap



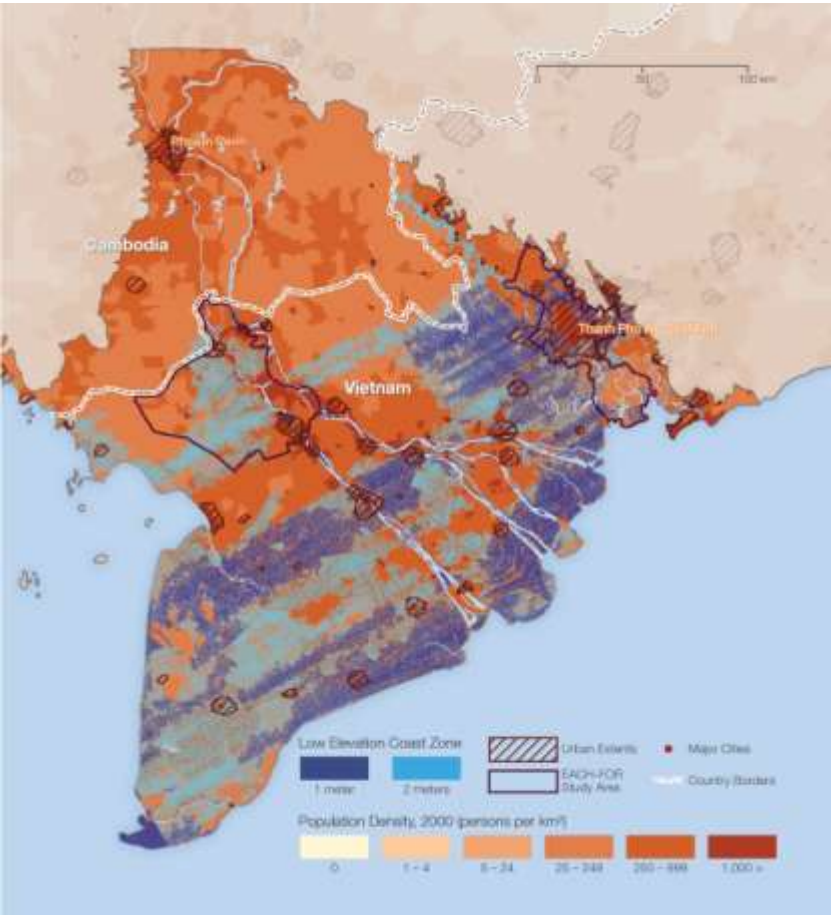
Adaptation Strategies

- For the communities living in the flooded forest, explore alternative livelihoods that minimize deforestation and over harvesting
- Integrated water resource management

Gaps

- Understand biology of commercially important fish species and other wildlife (migration, rearing grounds, feeding, sensitivity to temperature and flow) to better predict impacts of climate change and dams

Adaptation Strategies & Gaps: Mekong Delta



Adaptation Strategies

- Create a knowledge management network
- Create mechanism to enable cross-sectoral governance related to climate change
- Dialog between researchers and policy makers before planning of infrastructure
- Establish natural disaster early warning systems

Gaps

- Understand CC impacts on ecosystem services and the support they give to people
- Assess economic costs of impacts
- Better communicate science to reach ground and policy makers
- Calculate costs of maintaining current ecosystem services if infrastructure is built and the cost of maintaining infrastructure with climate change

Adaptation Strategies & Gaps: General

- Systematic, region-wide, monitoring of climate variables with a parallel recording of human and environmental variables (e.g. agricultural productivity, species abundance)