

PROTECTED AREAS, DEVELOPMENT AND CLIMATE CHANGE IN THE GREATER MEKONG SUBREGION

PAD 2 will examine the nexus of biodiversity conservation, development, and climate change throughout the Greater Mekong Subregion (GMS). It is a national government led review of biodiversity conservation and its significance for development and community welfare. PAD2 will establish the development benefits of the GMS protected areas estate and its critical role in poverty reduction. It will assess the status and trends in biodiversity, define the impacts of climate change on those trends, and develop appropriate management and adaptation responses for effective conservation. A GMS-wide partnership between government agencies, conservation NGOs, and regional organisations provides the operational foundation for the project that will lead to regional and national strategies for better integration of protected areas into development planning.

PROTECTED AREAS AND DEVELOPMENT (PAD) REVIEW

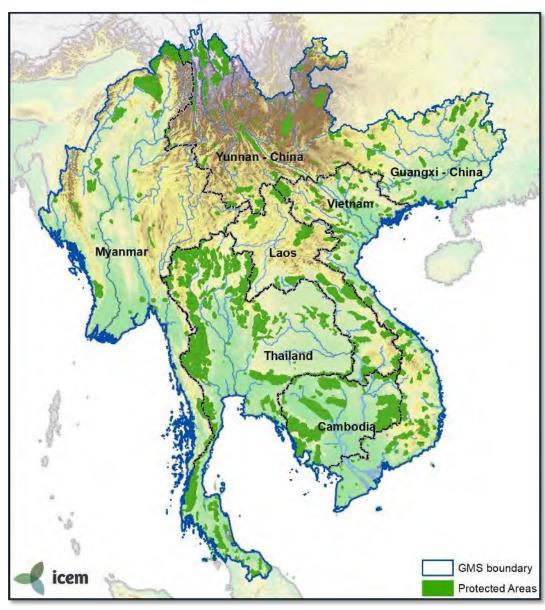
From 2000-2003 ICEM facilitated the government-led PAD Review in Lao PDR, Cambodia, Thailand, and Vietnam. It brought together government conservation and economic development agencies, conservation INGOs (IUCN, Birdlife International, WWF, Tropical Forest Trust, and the New South Wales National Parks and Wildlife Service), and multi- and bilateral organisations (ADB, MRC, UNDP, Danida, AusAID, Swiss Agency for Development and Cooperation, and the Royal Netherlands Government) in a partnership to assess the status of protected areas in the region and to define practical strategies to integrate their conservation within development planning. The four governments' formally adopted the national status reports and actions plans for the integration of protected areas and biodiversity conservation into national, sector and local development. For the first time, detailed analyses of the linkages between poverty and reduction and protected areas were available. This fed into collaborative management regulations and initiatives in all four countries. This extensive economic assessments also laid the foundation for the payment for ecosystems services regulations and demonstrations. Key donor partners supported the design and funding of major follow up projects. Most significantly, at the regional level the ADB established a small task force, including ICEM, to respond to the PAD Review and guide the establishment of the ADB **Environment Operations Centre.** The final PAD conference resolved to conduct a PAD Review every ten years - envisaging the need for a regular regional update on the status of protect areas, to devise new strategies, and renew regional cooperation.

CHALLENGES FACING PROTECTED AREAS IN THE GREATER MEKONG SUBREGION

Cambodia, Lao PDR, Myanmar, power development, Thailand, Vietnam, and China's Yunnan and Guangxi provinces - the GMS - is a global biodiversity hotspot, including one of the world's largest networks of protected areas, covering close to 20% of the region (shown below). These forests and wetlands provide ecosystem services that are a foundation of rural livelihoods and local economies. Services that are critical to the communities living in and around protected areas, as well as major national and regional economic development sectors such as

agriculture, and fisheries. Protected areas in the GMS are with intensifying threats. at risk from a range of pressures, including illegal logging, wildlife trade, commercial crop plantations, and infrastructure development. Despite the efforts of governments, donors them, as well as for broader and communities, the quality of protected areas and the services they provide is declining. Satellite imagery shows that the Lower Mekong region lost almost a third of its forest cover from 1973-2009. These pressures are degrading most of the protect areas in

the region, and management capacity is not keeping pace Climate change is further amplifying these threats. The preservation and extension of protected areas is a critical adaptation strategy for the communities whom depend on local and national economies. The escalating degradation of protected areas in the region, and the improved scientific understanding of critical issues such as climate change bring added urgency to updating the 2003 PAD Review.



EXPANDED SCOPE

PAD2 has three notable additions to its scope beyond the 2003 PAD Review:

Climate change poses a major threat to many of the region's existing ecosystems and will be included in the scope of PAD2. Myanmar and Yunnan and Guangxi provinces are also included in PAD2 to reflect the regional focus of development and conservation organisations on the broader GMS; the interdependent nature of GMS' ecosystems and basins; and the increasingly transboundary nature of development pressures.

Payments for ecosystem services projects will be developed as case studies throughout the region as part of PAD2 to ensure that the lessons learned are then implemented in practice.

CROSSCUTTING ISSUES

PAD2 aims to maintain and enhance the development benefits of protected areas by employing a bottom-up, case study approach to assess three payments for ecosystem central issues:

The status and trends of biodiversity in the GMS will be better understood with the establishment of a science evidence base.

Climate change impacts on protected areas will be defined and adaptation responses identified.

The economic benefits of ecosystem services and the effective management of protected areas as an adaptation strategy will be demonstrated for GMS countries.

MULTI-LEVEL ANALYSIS

Twelve case study protect area sites across the region will be analysed and function as feasibility studies for future services (PES) schemes. Field surveys in each case study will provide the basis for climate change vulnerability assessments conducted within workshops involving local stakeholders. Case study reports will be presented at national level workshops and be major inputs for national reports and action plans. The lessons will then be taken to the regional level through two workshops involving relevant governments, multilateral organisations and aid organisations. PAD2 will bring together government agencies to define ways to mainstream conservation and climate change adaptation.









Protected areas are even more important for biodiversity conservation and human livelihoods in a world with a changing climate

- Food and Agriculture Organization (2009)

The Mekong region's economy is intrinsically linked to its natural resource base, and as a consequence any changes in climate will have lasting impacts on the region

- World Wildlife Fund (2009)





INTERNATIONAL CENTRE FOR ENVIRONMENTAL MANAGEMENT

ICEM is an international leader in technical innovation and the management of climate change, biodiversity, natural resource management, water, and energy projects. They have over 20 years of experience in environmental management of the Mekong region, working with governments, conservation NGOs, and the private sector. ICEM was the initiator and lead technical organisation for the 2003 PAD Review, and will hold a similar role for PAD2.



INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE

IUCN is the world's oldest and largest conservation organisation. Their mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. With a strong operational presence in each of the GMS countries, IUCN will manage the operations and logistical co-ordination of PAD2.

FURTHER DETAILS

Jeremy Carew-Reid e. jecr@icem.com.au

Robert Mather
e. Robert.MATHER@iucn.org

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KEY COMPONENTS OF PAD2 PAD 2 - The Protected Areas, Development AND Climate Change in the Greater Mekong Subregion project – involves the six Mekong countries in a collaborative review of the region's protected areas and biodiversity estate. Two protected areas in each GMS country will be selected as case study sites that will be the subject of detailed analysis of the status of biodiversity, a feasibility study for future payments for ecosystem services schemes, and a field survey as the basis of a climate change vulnerability assessment in each country. PAD2 involves stakeholder consultation through each phase of the 30-month long project. There will be numerous meetings between the technical team; the National Core Group, which comprises senior government officials from conservation, environment, and economic development agencies; the Technical Advisory Group of international and national NGOs; and the Conservation Agency Working Group, which will comprise senior representatives of conservation agencies from each country. There will be two national workshops in each country and two regional workshops during the project. PAD2 will formally commence in 2015 and result in six national reports, a regional report, twelve case study reports, a report on 'The Economic Benefits of Protected Areas in the GMS, and one on 'Climate Change and biodiversity in the GMS. PAD2 will also produce a Regional Atlas of Biodiversity, Development, and Climate Change that will collate regional, national, and local-level maps produced through the project. An open-access Online Biodiversity Database will be established that contains an interface for viewing and downloading regional biodiversity data, and interactive mapping tools. The database will comprise data held by project partners, external sources, and other data produced during PAD2. By bringing these disaggregated data sets together, PAD2 will provide the first accessible and comprehensive hub for biodiversity data in the region. A dedicated interactive