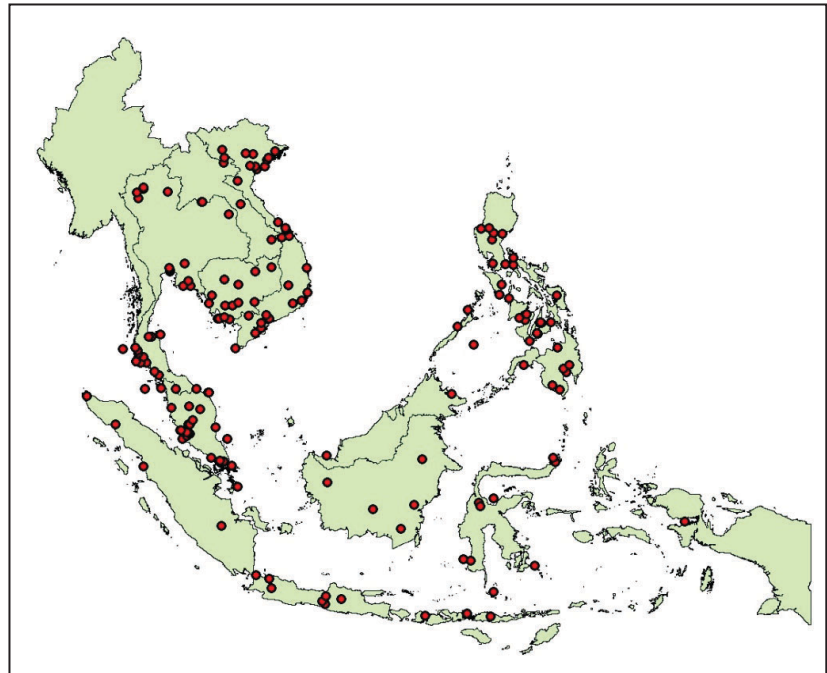


The ASEAN TEEB Scoping Study: Valuing ecosystem services in Southeast Asia

The ASEAN TEEB Scoping Study gathered and reviewed existing evidence on the value of ecosystem services in Southeast Asia. It identified key critical ecosystems and ecosystem services in Southeast Asia, conducted an initial set of case studies to highlight the value of ecosystem services, and identified and recommended policy relevant case studies in ASEAN Member States to be conducted in a future full ASEAN TEEB study. The objective of the ASEAN TEEB Scoping Study is to pursue the mainstreaming process of the economics of ecosystems and biodiversity through the conduct of assessment and valuation of key ecosystems and ecosystem services in Southeast Asia. The study also aims to assist ASEAN Member States to develop green growth economies.



Number of valuation estimates for each ecosystem service

There is a substantial existing body of evidence on the value of ecosystem services in Southeast Asia. A total of 182 studies that address the valuation of ecosystem services in Southeast Asia have been collected and organized in a database. These studies provide 787 separate value estimates of ecosystem service values. The geographic distribution of this information is uneven, with a large number of studies for Indonesia, Philippines, Thailand, Malaysia and Vietnam, but none for Brunei and Myanmar.

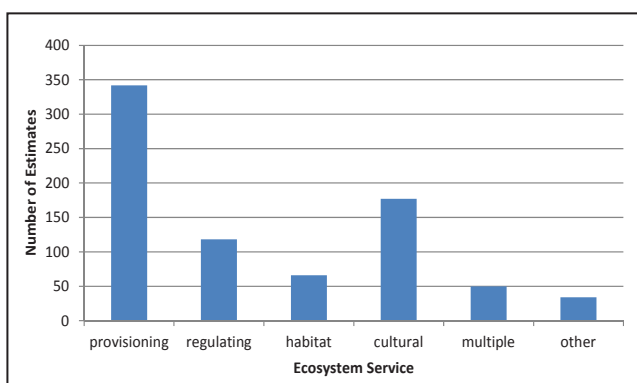
Forests have been by far the most extensively studied ecosystem, followed by wetlands, coastal ecosystems (combinations of coral reefs, mangroves

and sea-grasses), and mangroves. Provisioning services, particularly food and raw materials, have been the most extensively valued, along with cultural services, particularly for the opportunities provided by nature areas for recreation and tourism. Regulating services, such as flood and storm protection, have received relatively little attention, although these ecosystem services are likely to increase in importance over time in the context of climate change.

The four case studies presented in the Scoping Study highlight the importance of key ecosystems in Southeast Asia. The case studies were conducted at different scales (regional, provincial and local) and addressed ecosystem services from mangroves, coral reefs and forests. The case studies illustrated how information on the economic value of natural capital can draw attention to the need for conservation, the trade-offs involved, and the design of policy instruments to aid and finance conservation.

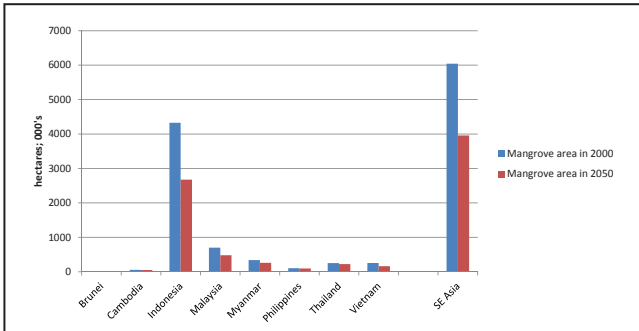
Mangroves

- The case study on mangroves presented a “business-as-usual” scenario of the loss in area of mangroves in Southeast Asia over the period 2000-2050 and estimates the reduction in the value

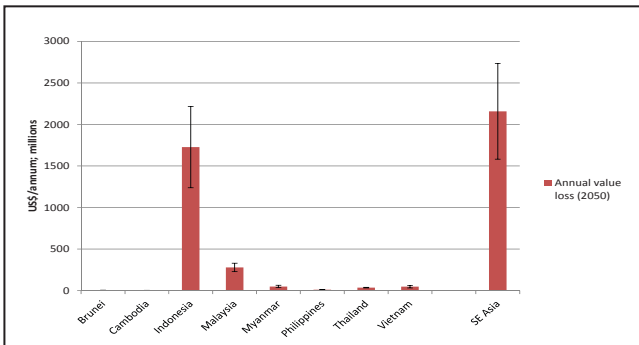


Number of valuation estimates for each ecosystem service

of two ecosystem services: coastal protection and habitat/nursery support for fisheries. The estimated foregone annual benefits in 2050 for Southeast Asia as whole are US\$ 2.2 billion.



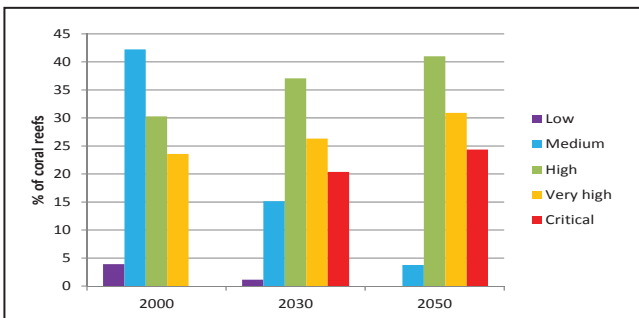
Total area of mangroves in 2000 and 2050



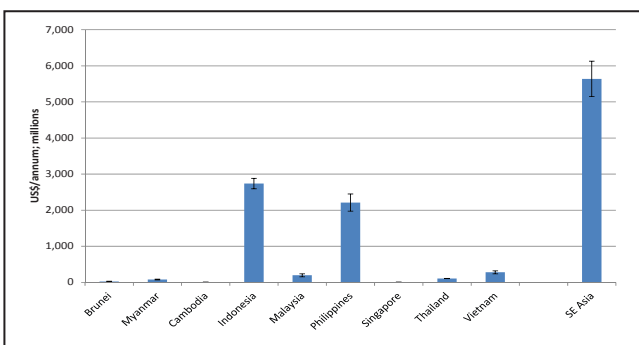
Value of lost mangroves in 2050

Coral Reefs

- The case study on coral reefs examined a business-as-usual scenario of loss in coral reefs in Southeast Asia for the period 2000-2050. The annual lost value of reef related fisheries is estimated to be approximately US\$ 5.6 billion in 2050.



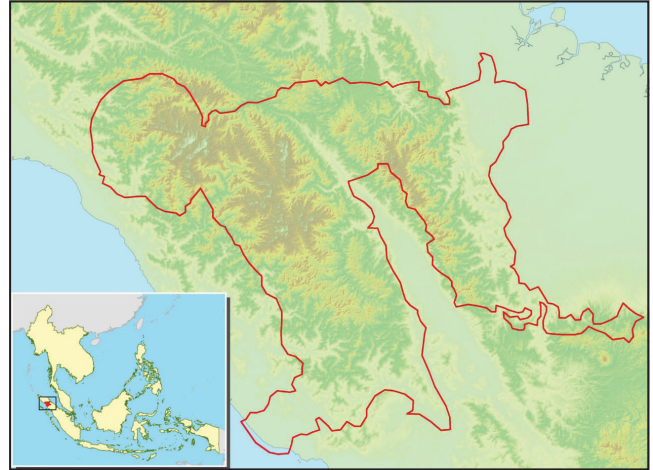
Level of threat to coral reefs in Southeast Asia 2000, 2030, 2050. Source: Burke et al. (2011)



Lost value of reef related fisheries in 2050

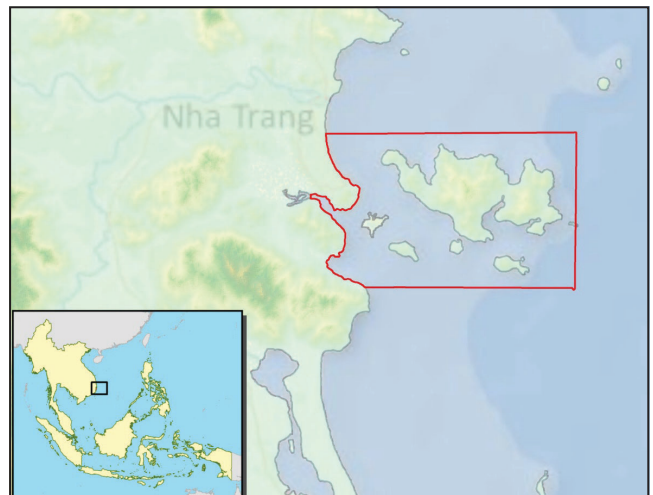
Forests

- The case study on the Leuser forest ecosystem in Sumatra, Indonesia highlighted the distribution of ecosystem service benefits across different stakeholders and the trade-off between short term gains for some versus larger long term losses for others.



Protected Area

- The case study on the Hon Mun marine protected area (MPA) in Vietnam illustrated the potential impact of information on the economic values of ecosystem services to improve decision making regarding nature conservation and finance. The recommendation to introduce a user fee that is earmarked for use by the MPA has been adopted and the MPA is now partially self-financed.



Next Steps

Suggestions for future policy relevant TEEB studies have been elicited from environment officials in the ASEAN Member States. The suggested cases for a full ASEAN TEEB study cover a wide spectrum of environmental and policy contexts from the provision of urban green space to the financing of protected forests and wetlands.