

ANNEX 3.1: Description of GMS Priority Biodiversity Conservation Corridors

Western Forest Complex (Thailand/Myanmar)

Figure 1: Western Forest Complex

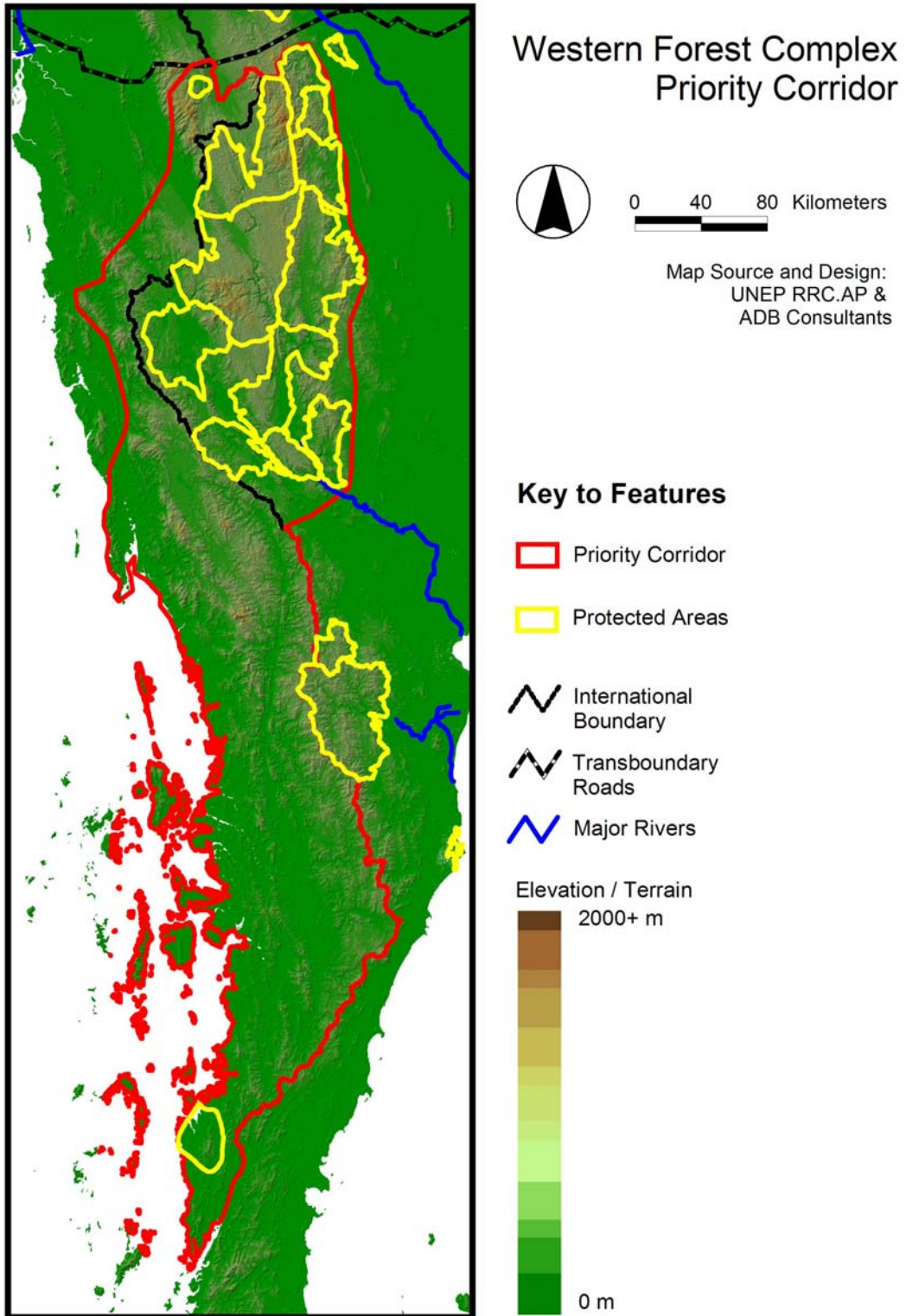
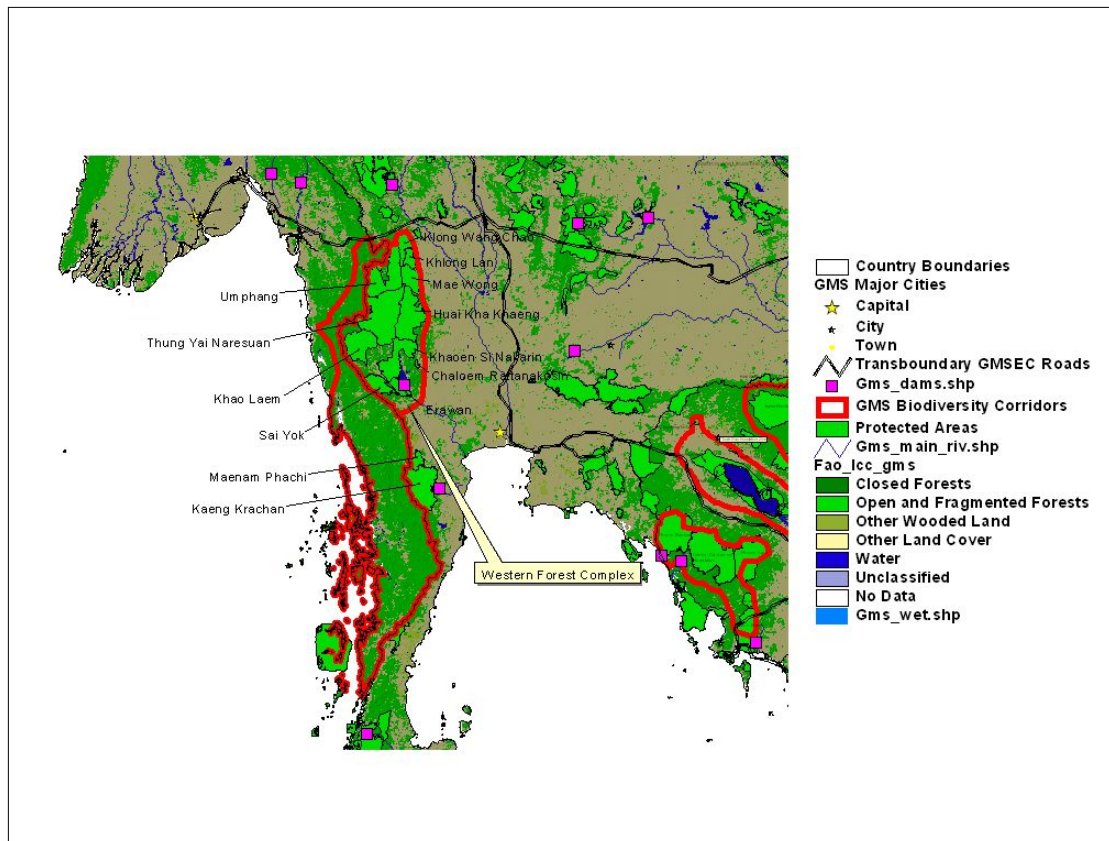


Figure 3. The Western Forest Complex GMSBCC, showing the protected areas, major transnational roads, dams, and remaining forest cover.



The region has a highly dissected topography, with Paleozoic limestone hills characterized by overhanging cliffs, sinkholes, and caverns. The forests on these limestone hills support a distinct fauna and flora high in endemic species. The west-facing slopes that receive the brunt of the monsoon rains support moist forests whereas the east-facing slopes in the rain shadow support drought-deciduous forests characterized by deciduous dipterocarp species such as *Dipterocarpus tuberculatus* and *D. obtusifolia* and oaks (*Quercus kerrii*). However, edaphic factors also affect the vegetation and substrates with a higher water-holding capacity support a higher proportion of evergreen broadleaf species, whereas forests on limestone are mostly drought-deciduous. Plants on bare limestone crags have a distinctive physiognomy, with fleshy stems and small, sometimes ephemeral leaves. The mountain ridges support a number of Himalayan plant taxa including members of the oak family (*Castanopsis*, *Quercus*, and *Lithocarpus*), *Schima wallichii*, and members of the birch and alder families. *Rhododendron* occurs at the highest elevations. Thus, seasonal rainfall, elevation, substrate, and biogeography all contribute to the forest diversity of these ecoregions.

The GMSBCC includes one of Thailand's most important protected areas complexes, comprising of Khao Laem NP, Khaoen Si Nakerin NP, Erawan NP, Khlong Lan NP,

Mae Wong NP, Klong Wang Chao NP, Sai Yok NP, Umphang WS, Huai Kha Khaeng WS, Thung Yai Naresuan WS (Figure above). This protected areas complex, lying along the international boundary with Myanmar is contiguous with intact forests in Myanmar, and have been identified as being extremely important for conservation of elephants and tigers (Dinerstein *et al.* 1997, WWF 1998²). Other species of conservation importance in this landscape include Malayan tapir, Gaur, Banteng, Wild Water Buffalo, and Clouded leopard. Among the notable birds of conservation significance are the Globally Threatened Plain-pouched hornbill and the largest population of the Critically Endangered Gurney's Pitta, a species endemic to Tanintharyi Division and a small area in peninsular Thailand (Anon. 2003³).

Key Conservation Issues and Threats to Biodiversity

The major threats to this landscape include habitat degradation from logging and shifting cultivation. Forests are being rapidly cleared for intensive, cash-crop agriculture.

Increasing population pressure has forced itinerant farmers to reduce the cycle of cultivation-fallow periods and pushed them deeper into the forest where old-growth forests are being cleared. Hunting is also a major threat in this region.

Impact of the GMSEC

The East West GMSEC lies across the northern part of the landscape, and crosses several protected areas in the Western Forest Complex (Figure above).

Although the transnational road from Bangkok to Yangon skirts the northern boundary of the GMSBCC, the zone of influence will intrude into the GMSBCC.

There is one operational dam within the GMSBCC.

² WWF. 1998. Asian Rhino and Elephant Action Strategy. Unpubl WWF Report.

³ Cited in CEPF 2004b